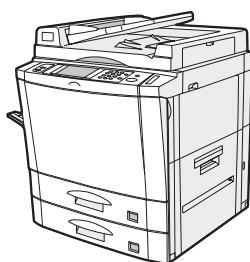
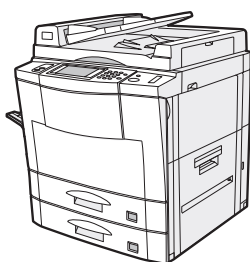


# SHARP SERVICE MANUAL

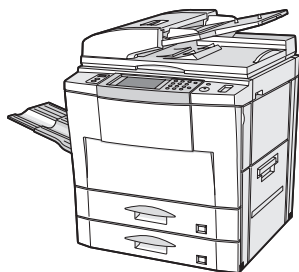
CODE: 00ZAR507//A1E



(AR-287/337)



(AR-407)



(AR-507)

## Digital Copier

**AR-287****AR-337****AR-407****MODEL AR-507**

### CONTENTS

**[Note]**

This Service Manual describes only the differences from 00ZAR-505//A1E. The items which are not described in this Manual are common with the 00ZAR505//A1E.

[ 1 ]	GENERAL .....	1-1
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Parts marked with "△" is important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

The AR-287/337/407/507 is a slightly upgraded model of the AR-286/336/405/505.  
The base models and their upgraded models are listed in the table below.

#### Upgrade list

Base model	Upgraded model
AR-286	AR-287
AR-336	AR-337
AR-405	AR-407
AR-505	AR-507

#### List of changes AR-286/336/405/505 to AR-287/337/407/507

AR-286/336/405/505				AR-287/337/407/507																																																							
Section	Page	Content		Change	Remark																																																						
[1]	GENERAL																																																										
	1-3 1-6 1-7 1-8	2. System outline (Options)		The network scanner kit (AR-NS1) is added.	Refer to the attached page 1-3A/4A.																																																						
[2]	SPECIFICATIONS																																																										
	2-1 2-4   2-6	1. Machine type 13. Additional functions A. Main body functions B. Copy function  15. Other specifications  16. Outlook		Memory  Communication (E-mail Status/E-mail Alerts) New functions are added.  The following six new functions are added.: 21. Tandem function 22. Confidential print 23. Large volume document mode 24. Security function 25. Network Scanning 26. E-mail Status/E-mail Alerts	Refer to the attached page 2-7/8/9/10/11/12.																																																						
[3]	CONSUMABLE PARTS																																																										
	3-1 to 3-7	1. Consumable Parts List		Change (Lower Heat Roller Kit/Lower Heat Roller)	Refer to the attached page 3-8A/9A.																																																						
[4]	INSTALLATION AND SETUP			No change																																																							
[5]	EXTERNAL VIEW AND INTERNAL STRUCTURE			No change																																																							
[6]	SETTING AND ADJUSTMENTS																																																										
	6-3	(3) Developing bias voltage adjustment		(3) Developing bias voltage adjustment																																																							
		<table><tr><th rowspan="2"></th><th colspan="2">Adjustment range</th></tr><tr><th>AR-501 /505</th><th>Others</th></tr><tr><td>Developing negative bias voltage (Auto)</td><td>-425 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing negative bias voltage (Character)</td><td>-500 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing negative bias voltage (Character, Photo)</td><td>-500 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing negative bias voltage (Photo)</td><td>-500 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing bias (Printer)</td><td>-500 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing positive bias voltage</td><td>+150 ±5V</td><td>+150 ±5V</td></tr></table>			Adjustment range		AR-501 /505	Others	Developing negative bias voltage (Auto)	-425 ±5V	-500 ±5V	Developing negative bias voltage (Character)	-500 ±5V	-500 ±5V	Developing negative bias voltage (Character, Photo)	-500 ±5V	-500 ±5V	Developing negative bias voltage (Photo)	-500 ±5V	-500 ±5V	Developing bias (Printer)	-500 ±5V	-500 ±5V	Developing positive bias voltage	+150 ±5V	+150 ±5V	<table><tr><th rowspan="2"></th><th colspan="2">Adjustment range</th></tr><tr><th>AR-287/337/407</th><th>AR-507</th></tr><tr><td>Developing negative bias voltage (Auto)</td><td>-500 ±5V</td><td>-425 ±5V</td></tr><tr><td>Developing negative bias voltage (Character)</td><td>-500 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing negative bias voltage (Character, Photo)</td><td>-500 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing negative bias voltage (Photo)</td><td>-500 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing negative bias voltage (Toner save)</td><td>-450 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing negative bias voltage (Printer)</td><td>-500 ±5V</td><td>-500 ±5V</td></tr><tr><td>Developing positive bias voltage</td><td>+150 ±5V</td><td>+150 ±5V</td></tr></table>		Adjustment range		AR-287/337/407	AR-507	Developing negative bias voltage (Auto)	-500 ±5V	-425 ±5V	Developing negative bias voltage (Character)	-500 ±5V	-500 ±5V	Developing negative bias voltage (Character, Photo)	-500 ±5V	-500 ±5V	Developing negative bias voltage (Photo)	-500 ±5V	-500 ±5V	Developing negative bias voltage (Toner save)	-450 ±5V	-500 ±5V	Developing negative bias voltage (Printer)	-500 ±5V	-500 ±5V	Developing positive bias voltage	+150 ±5V	+150 ±5V						
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		(4) Main charger grid voltage adjustment		(4) Main charger grid voltage adjustment																																																							
		<table><tr><th rowspan="2"></th><th colspan="3">Adjustment range</th></tr><tr><th>AR-280/285/335</th><th>AR-250/281/286/336/405</th><th>AR-501 /505</th></tr><tr><td>Grid voltage (Auto)</td><td>-642 ±5V</td><td>-602 ±5V</td><td>-570 ±5V</td></tr><tr><td>Grid voltage (Character)</td><td>-642 ±5V</td><td>-602 ±5V</td><td>-645 ±5V</td></tr><tr><td>Grid voltage (Character, Photo)</td><td>-642 ±5V</td><td>-602 ±5V</td><td>-645 ±5V</td></tr><tr><td>Grid voltage (Photo)</td><td>-642 ±5V</td><td>-602 ±5V</td><td>-645 ±5V</td></tr><tr><td>Grid voltage (Printer)</td><td>-642 ±5V</td><td>-602 ±5V</td><td>-645 ±5V</td></tr><tr><td>Grid voltage (FAX)</td><td>-642 ±5V</td><td>-602 ±5V</td><td>-645 ±5V</td></tr></table>			Adjustment range			AR-280/285/335	AR-250/281/286/336/405	AR-501 /505	Grid voltage (Auto)	-642 ±5V	-602 ±5V	-570 ±5V	Grid voltage (Character)	-642 ±5V	-602 ±5V	-645 ±5V	Grid voltage (Character, Photo)	-642 ±5V	-602 ±5V	-645 ±5V	Grid voltage (Photo)	-642 ±5V	-602 ±5V	-645 ±5V	Grid voltage (Printer)	-642 ±5V	-602 ±5V	-645 ±5V	Grid voltage (FAX)	-642 ±5V	-602 ±5V	-645 ±5V	<table><tr><th rowspan="2"></th><th colspan="2">Adjustment range</th></tr><tr><th>AR-287/337/407</th><th>AR-507</th></tr><tr><td>Grid voltage (Auto)</td><td>-602 ±5V</td><td>-570 ±5V</td></tr><tr><td>Grid voltage (Character)</td><td>-602 ±5V</td><td>-645 ±5V</td></tr><tr><td>Grid voltage (Character, Photo)</td><td>-602 ±5V</td><td>-645 ±5V</td></tr><tr><td>Grid voltage (Photo)</td><td>-602 ±5V</td><td>-645 ±5V</td></tr><tr><td>Grid voltage (Toner save)</td><td>-552 ±5V</td><td>-645 ±5V</td></tr><tr><td>Grid voltage (Printer)</td><td>-602 ±5V</td><td>-645 ±5V</td></tr></table>		Adjustment range		AR-287/337/407	AR-507	Grid voltage (Auto)	-602 ±5V	-570 ±5V	Grid voltage (Character)	-602 ±5V	-645 ±5V	Grid voltage (Character, Photo)	-602 ±5V	-645 ±5V	Grid voltage (Photo)	-602 ±5V	-645 ±5V	Grid voltage (Toner save)	-552 ±5V	-645 ±5V	Grid voltage (Printer)	-602 ±5V	-645 ±5V	
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AR-286/336/405/505				AR-287/337/407/507					
Section	Page	Content			Change			Remark	
[6]	6-5	(5) Transfer charger current adjustment			(5) Transfer charger current adjustment				
		Transfer charger current	Adjustment spec						
			AR-250/280 /281/285/286 /335/336	AR-405					AR-501 /505
			TC drum current (Front surface mode)	+13.5 +1.5μA					+15.0 +1.5μA
		TC drum current (Back surface mode)	+13.5 +1.5μA	+15.0 +1.5μA					+18.0 +1.5μA
(6) Separation charger DC component voltage			(6) Separation charger DC component voltage						
	Adjustment range								
	AR-250/280 /281/285/286 /335/336	AR-405					AR-501 /505		
	Separation DC component voltage (Front surface mode)	-140 ±10V					-150 ±10V	-200 ±10V	
Separation DC component voltage (Back surface mode)	-140 ±10V	-150 ±10V					-200 ±10V		
[7]	SIMULATION			Change			Refer to the attached page 7-51 – 7-57.		
	B. List C. Details of simulations 8-1 8-2 8-6 8-7 22-1 26-10/12/13 26-22 26/32 26-44 26-52 50-1/2 50-26 51-3 61-2/4 67-18								
[8]	DISASSEMBLY, ASSEMBLY, MAINTENANCE			No change					
[9]	TROUBLE CODE LIST			Add (Trouble code: CE)			Refer to the attached page 9-1		
[10]	OPERATIONAL DESCRIPTION			No change					

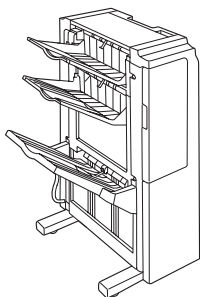




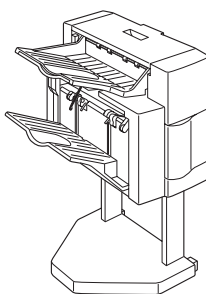
## 2. System outline (Options) (AR-287/337/407/507)

		Copier model			
Name	Model	AR-287	AR-337	AR-407	AR-507
Automatic document feeder	RSPF	—	—	—	Standard
Reversing automatic document feeder	AR-RF1	Standard	Standard	—	—
	AR-RF2	—	—	Standard	—
Stand/500 sheet paper drawer	AR-DE1N	○	○	○	—
	AR-DE7	—	—	—	○
Large capacity tray	AR-LC1N	○	○	○	○
500-sheet paper drawer	AR-CS1	○	○	○	—
	AR-CS3	—	—	—	○
Desk	AR-DD1	○	○	○	○
2-tray paper exit unit	AR-DU1	Standard	Standard	Standard	Standard
Exit tray	AR-TE1	○	○	○	○ (SEC/SECL)
	AR-TE2	—	—	—	○ (EX destinations other than SEC/SECL)
Dual tray output unit	AR-TR1	○	○	○	—
Finisher	AR-FN1N	○	○	○	—
	AR-FN2	○	○	○	—
	AR-FN3	—	—	—	○
Printer board	AR-PB2A	○	○	○	○
	AR-SM1	○	○	○	○
NIC card (10 base T/2)	AR-NC1D	○	○	○	○
NIC card (10 base T/100 base TX)	AR-NC3D	○	○	○	○
Network scanner kit	AR-NS1	○	○	○	○
Mounting kit	AR-XB3	○	○	○	○
Tandem connection cable	AR-CA1	—	○	○	○
Sharpdesk 5 license kit	AR-U11M	○	○	○	○
	AR-U15M	○	○	○	○
Security ROM	AR-FR1	○	○	—	—
	AR-FR2	—	—	○	—
	AR-FR3	—	—	—	○

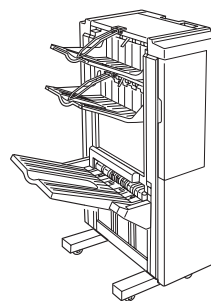
Finisher:  
AR-FN1N (AR-287/337/407)



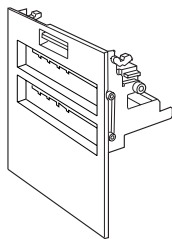
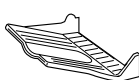
Finisher:  
AR-FN2 (AR-287/337/407)



Finisher:  
AR-FN3 (AR-507)

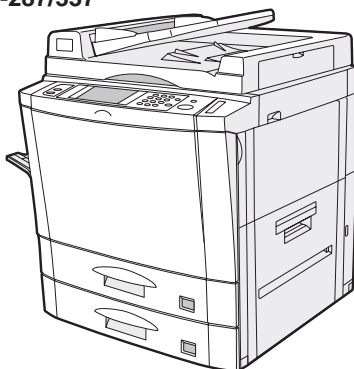


Exit tray:  
AR-TE1 (AR-287/337/407/507 (SEC/SECL))  
AR-TE2 (AR-507 (Other than SEC/SECL))

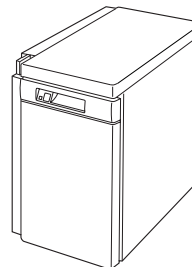


Dual tray output unit:  
AR-TR1

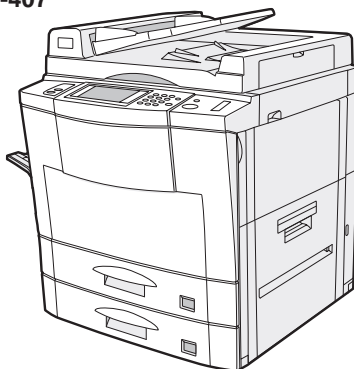
### AR-287/337



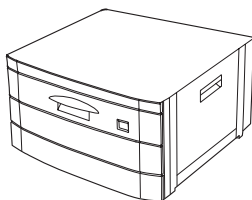
Large capacity:  
AR-LC1N (AR-287/337/407/507)



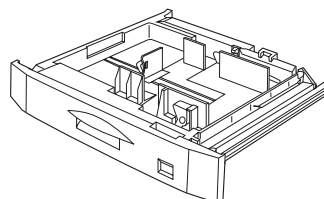
### AR-407



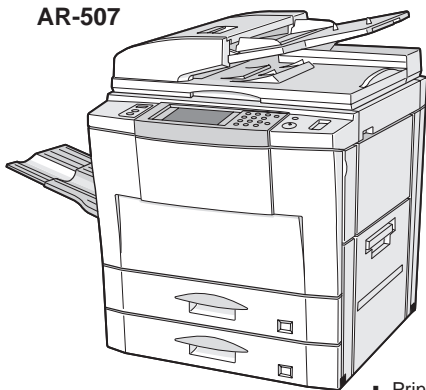
Stand/500 sheet  
paper drawer:  
AR-DE1N (AR-287/337/407)



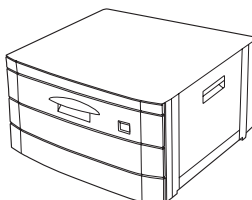
500-sheet paper drawer:  
AR-CS1 (AR-287/337/407)



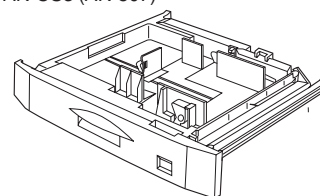
### AR-507



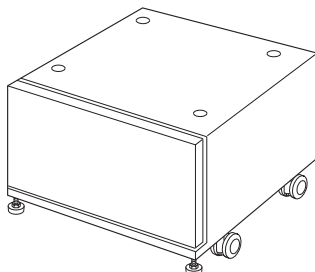
Stand/500-sheet  
paper drawer:  
AR-DE7 (AR-507)



500-sheet paper drawer:  
AR-CS3 (AR-507)



Desk: AR-DD1



- Printer board: AR-PB2A
- NIC card (10baseT/2) (Provided by local distributors): AR-NC1D
- NIC card (10 base T/100 base TX): AR-NC3D
- Printer board (Expansion memory 16MB x2 SIM): AR-SM1 (AR-507)
- Network scanner kit: AR-NS1
- Tandem connection cable AR-CA1
- Mounting kit: AR-XB3 (AR-287/337/407)
- Sharpdesk 5 license kit: AR-U11M/U15M
- Security ROM: AR-FR1 (AR-287/337)  
AR-FR2 (AR-407)  
AR-FR3 (AR-507)

## [2] SPECIFICATIONS (AR-287/337/407/507)

### 1. Machine type

Product Name	CPM	Type		Document Feeder	Paper Exit	Memory	
						RAM	HD
AR-287	28	Duplex	Desk top	RADF	1 tray	32 MB	4.3 GB
AR-337	33	Duplex	Desk top	RADF	1 tray	32 MB	4.3 GB
AR-407	40	Duplex	Desk top	RADF	1 tray	32 MB	4.3 GB
AR-507	50	Duplex	Desk top	RSPF	1 tray	48 MB	4.3 GB

\* Standard's spec

### 13. Additional functions

#### A. Main body functions

APS	
AMS	AMS by flow scan with DF is not allowed.
Auto tray switching	
1 scan multi copy	
Rotation copy	
Pre-heat	Conditions are set with the key operation.
Auto shut off	Conditions are set with the key operation.
Message display	
Key operator program	
Communication	E-mail Status/E-mail Alerts
Process control	
Coin vendor	Only the connector is provided on the PWB.

#### B. Copy function

	AR-287/337	AR-407	AR-507
Job call/ registration	9		
Dept. control	Max. 50 dept. (Copy/Print/Tandem)		Max. 500 dept.
Binding margin	Shift width AB series: 10mm, Inch series: 1/2" with adjustment (Binding direction selectable)		
Edge erase	AB series: 10mm, Inch series: 1/2" with adjustment		
Center erase			
1-set, 2-copy			
Independent zooming	25 to 800% for vertical/horizontal	25 to 400% for vertical/horizontal	
White/black reversion	All surface only (only in the manual mode)		
Cover paper	Cover/back cover/cover and back cover		
OHP insert paper	Insert paper copy Yes/No selectable		Only 1 face-up paper exit is possible
Centering			
Multi shot (Nin1)			
Repeat copy	Combination with AMS allowed		
Date print	Time setting by the key operation.		
Stamp function			
Middle binding			
Page print			
Confidential print			
Security function	Security ROM is installed. (AR-FR1/FR2/FR3)		
Tandem print (copy/print)	When the tandem connection cable is connected (AR-287 invalid)		
Network scanner	When the scanner expansion kit is installed		
Large quantity document mode	Documents of 120 sheets *1		

\*1: 60 sheets for sizes greater than A4 with print data

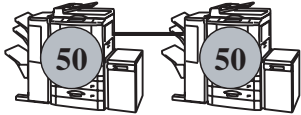
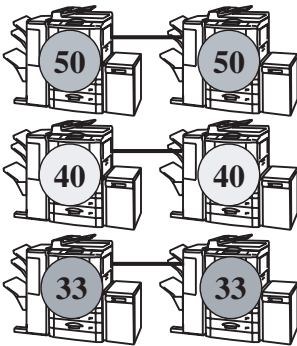
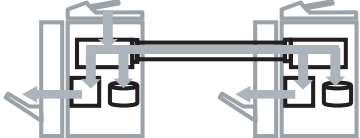
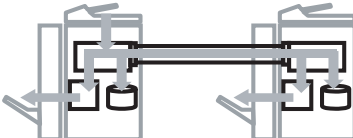
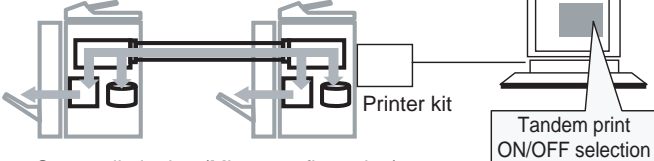
### 15. Other specifications

Photoconductor kind	OPC drum	
Photoconductor dia.	65 φ	
Process cleaning	Blade	
Exposure lamp	No-electrode xenon lamp	
Developing system	Dry, 2-component magnetic brush development	
Charging system	DC negative scorotron (saw tooth electrode)	
Transfer system	DC positive control	
Separation system	AR-287/337/407	AC corotron/DC bias separation pawl
	AR-507	Photo discharge/AC corotron /DC bias separation pawl
Fusing system	Heat roller	
Fusing cleaning	AR-287/337/407	—
	AR-507	Yes

### 16. Outlook

	W × D × H (mm)	Machine occupying dimensions	Weight
AR-287/337	600 × 695 × 750	1292 × 695	Approx 98 kg
AR-407	600 × 700 × 750	1292 × 700	Approx 98 kg
AR-507	600 × 700 × 773	1292 × 700	Approx 102 kg

## 21. Tandem function

	AR-505	AR-507/407/337
Model		
Job	<p>Copy</p> 	<p>Copy</p>  <p>Print</p>  <p>Limitation</p> <ul style="list-style-type: none"> <li>System limitation (Mirror configuration) Two models in tandem connection must be of the same ROM version and the same option composition.</li> </ul>

### (Outline)

Enhances the process efficiency of large volume copying.

- Shortens the copying time.
- Allows selection between dispersed process and integrated process.

Models with the tandem function:

AR-505, AR-337, AR-407, AR-507 (Connection between different models is inhibited.)

Number of connections: Max. 2

Installation/connection method:

Serviceman installation/Tandem cable connection (Cable length 4m)

Jobs available:

- Copy only (AR-505)
- Copy output/print output (AR-337, AR-407, AR-507)

Tandem copy operation mode:

Sort/Staple mode (Group cannot be selected.)

Job division system:

1/2 auto division (In case of an odd number, the MAIN side is +1.)

Mutual recovery in case of a trouble:

Not available (After dividing a job, each machine finishes its process.)

Basic operation:

After data transmission from MAIN to SUB, operation is performed independently.

Option composition:

- When only one finisher is installed, the finishing process cannot be selected. (AR-505)
- When there is a difference in the option composition, tandem copy/print is not performed. (AR-337, AR-407, AR-507) \*1

ROM version:

- The ROM versions of two machines must be identical.

Relationship between MAIN and SUB:

- Main starts a job. SUB receives the job separated from MAIN. (AR-505)
- In tandem copy, MAIN and SUB are set with a simulation. Tandem copy cannot be selected from SUB. (AR-337, AR-407, AR-507)

Tandem copy start conditions:

When the tandem function is set, MAIN goes into the READY state even though SUB is in the following conditions.

State of SUB	SUB display after starting
Paper empty	Paper supply message
Paper size wrong	Paper check message
Cover open	Cover open message
Jam	Jam map display
Pre-heat	After recovery, MAIN and SUB start together.
Toner empty	Toner supply message

Tandem print start condition:

When tandem print data is received, tandem print is performed even though SUB is in the following conditions.

State of SUB	Operation	Message displayed
Paper empty	Tandem operation	Paper supply message
Paper size wrong	Tandem operation	Paper check message
No suitable paper size	Tandem operation	Paper set message
Pre-heat	Tandem operation	After recovery of SUB, the operation is automatically started.

Availability of tandem copy from each condition:

Tandem operation is performed only when MAIN is in stand-by or during printing and SUB is in stand-by.

Start of tandem copy from each condition:

When MAIN is in stand-by and SUB is copying, printing, or scanning, all copies are outputted from MAIN.

\*1: "Option" means a finisher, an ADU, a paper feed desk, a large-capacity tray, or a paper feed module.

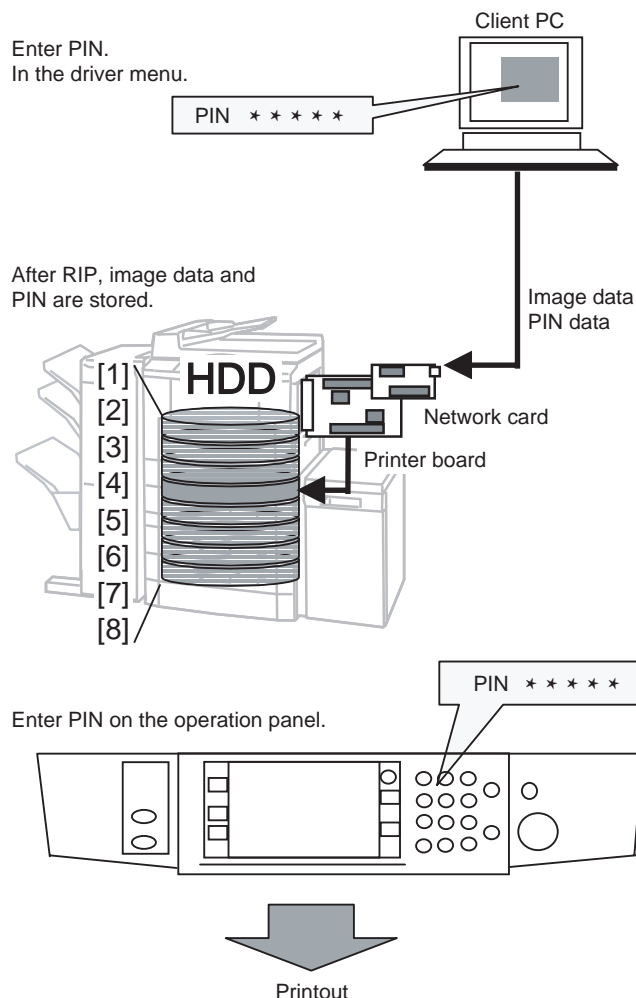
(Operations when there is a difference between the option compositions)

1. Tandem copy: The tandem copy key is displayed, but the conditions to execute the tandem function are not satisfied.  
Code: XX

Code	Tandem operation condition
00	SCSI communication disable
Code	Tandem mirror condition
10	Model code disagreement
11	ICU-ROM version disagreement
12	PCU-ROM version disagreement
13	OPE-ROM version disagreement
20	After-process unit connection disagreement
21	Paper exit port connection disagreement
22	ADU connection disagreement
23	DESK connection disagreement
24	LCC connection disagreement
30	ADU trouble information disagreement
40	Sim26-6: Destination setup disagreement
41	Sim26-46: Image output direction setup disagreement
50	Security mode setup disagreement
51	Duplex copy inhibition setup disagreement
52	Staple inhibition setup disagreement
53	Manual tray select inhibition disagreement when offset tray is selected

2. Tandem print: All the prints are made by MAIN.

## 22. Confidential print



### (Outline)

To protect confidential documents, print is inhibited unless the user performs the specified operation from the main operation panel after giving a print command from PC.

#### (1) Accumulated print jobs

Number of jobs	Number of pages of one job (A4, letter)
1	320 pages
2	240 pages
4	120 pages
8	60 pages
16	28 pages

#### (2) The following operations can be performed during operation of confidential print or during confidential printing.

- Checking all the lists of the accumulated confidential prints.
- Delete of confidential print data (Password entry is required.)
- Cancel of confidential print during printing by means of the "C" key. Invalid during recovery from pre-heat.

#### (3) The following operations cannot be performed during confidential printing.

- Changing the environment setup by means of the environment setup key.
- Command of continuous output in a different size or from a different tray
- For confidential printing, paper selection is allowed only in AUTO selection.
- For confidential printing, paper insertion, booklet, and OHP index paper insertion are inhibited.

#### (4) Confidential print output operation is allowed or inhibited as follows

Ready:	Allowed
Copy reading:	Inhibited
Copy outputting:	Inhibited
Scanner document scanning:	Inhibited
Scanner data transmission:	Inhibited
Printing:	Inhibited (Confidential print allowed when interrupted in offline.)
Staple printing:	Inhibited
Tandem copy reading:	Inhibited
Tandem copy outputting:	Inhibited
Tandem print outputting:	Inhibited

#### (5) Conditions of password

Number of digits:	5
Characters:	Only numeric figures 0 to 9

#### (6) Process in the case of HDD overflow

- The job is canceled.
- The status monitor makes the error display to PC.
- Notice Page output is performed.

#### (7) Troubles during printing

When the machine is stopped by paper empty or a paper jam, remove the trouble, and the job will be automatically continued.

#### (8) Combination with the security function

- When the security function is ON, confidential print is inhibited.
- When confidential data is received, it is automatically canceled.
- The status monitor makes the error display to PC.
- Notice Page output is performed.

### (9) Operations when the printer department management function is set

- When the key operator program (to record the print quantity to each department) is ON, the department management function is valid to confidential print.
- In this case, when an output command is made from the operation panel, entry of the department number is not required.

### (10) Combination with tandem print

- Combination between tandem print and confidential print is not allowed.

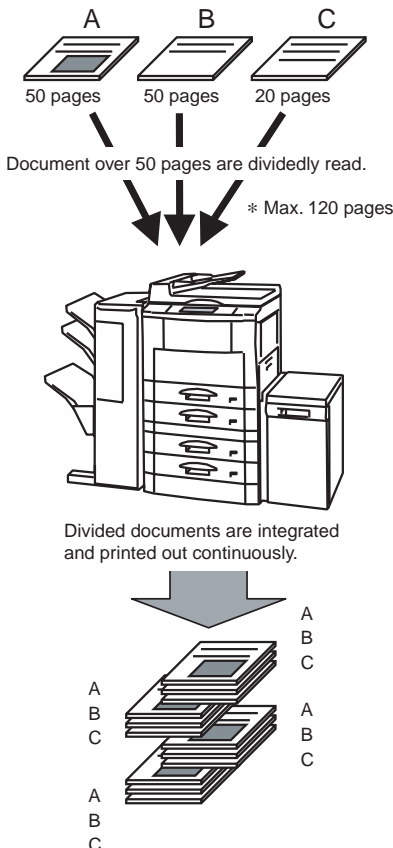
### (11) In case of a trouble

- When trouble code F9 occurs, the display cannot shift to the confidential menu.

### (12) Data storage

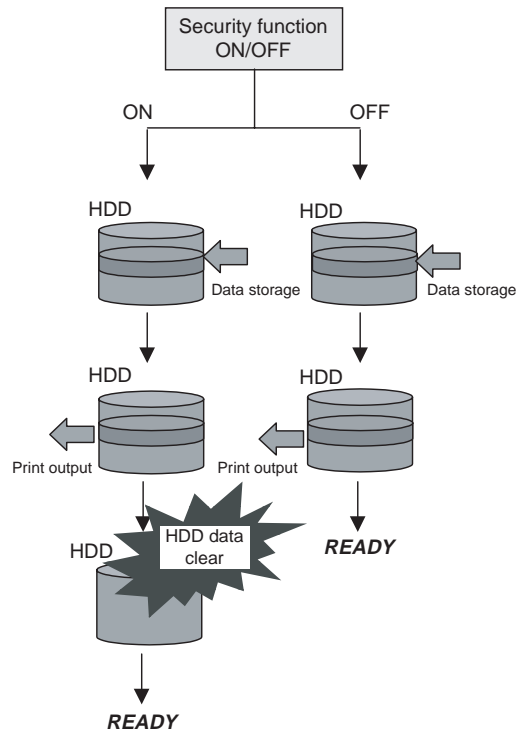
- When an output is completed, data are deleted from the list.
- When the printer power is turned off with the confidential print data remained in the HDD, the confidential print data are deleted completely.
- When the auto power shut off function activates, the confidential print data are deleted completely.

## 23. Large volume document mode



- A large volume of documents, which cannot be fed by the document feeder at one time, is divided and read and copied. (Max. 120 pages)
- The sequence of reading documents is from the top bundle of documents in the normal sequence for the 1 to N machine, and from the bottom bundle of documents in the reverse sequence for the N to 1 machine.
- When copying is performed in this mode, the copy mode cannot be changed. However, interruption copy is allowed.
- When the large volume mode is set in the SDF mode, the auto feed function of the SDF mode is disabled and the operations are made according to the large volume mode.

## 24. Security function



### (Outline)

In the current model, when the following job is entered after completion of output (copy, print) and before deleting the data in the HDD, the new data is overwritten to the former data. Therefore, the data can be read by removing the HDD from the machine and the confidentiality is not kept. Therefore, the data in the HDD is deleted after completion of output.

### A. Security mode operation

#### (1) Process after completion of output

Every time when an output is completed, the data in the HDD is deleted.

During deleting operation, the other operations is disabled.

#### (2) Addition of HDD data delete function

All document data in the HDD can be deleted by operating the operation panel.

To prevent data from being left in the HDD when the main power is turned off, it is advisable for users who seek a high level of security to perform this operation.

The key operator can perform this operation.

When this key is pressed, all image data in the HDD including confidential print data is deleted.

### B. Security mode selection

#### (1) ON/OFF selection

Initial setup: OFF

Though the security mode is OFF, the "HDD data delete" key is active.

#### (2) Simulation countermeasures

Simulation allows to select YES/NO of display of the security mode in the key operator program.

Shipment setup: OFF

### C. Combination with confidential print

When the security function (the check box of security mode setup) is ON, confidential print is inhibited.

When confidential data is received, it is automatically canceled.

The status monitor makes the error display to PC.

Notice Page output is performed.

## D. Note for job interruption

Though the security function is ON, if the machine is stopped due to the following causes, deletion after completion of output and deletion of HDD data is disabled unless the cause is removed and the job is completed.

If the machine is left, data is remained in the HDD for a long time. Be careful of that.

- Paper empty
- Paper jam
- Toner empty
- Interruption copy

## E. Combination with tandem copy

- When the security mode check box is ON, tandem copy cannot be set.
- When the security mode check box is ON, if tandem print data is received, all are printed by MAIN.

## F. Deletion of HDD data is not performed in the following cases

- During warm-up  
If the "HDD data delete" key of the key operator program is pressed during warm-up, the message below is displayed:  
"Cannot be performed during warm-up.  
Execute after completion of warm-up."
- When a service call occurs with the security mode ON, the user setup key does not work and the HDD data cannot be deleted.

# 25. Network Scanning

## A. Specifications

Item	Scanner expansion kit
Maximum Document Size	A3/WLT
Original Feeding Speed (PPM)	24PPM: AR-287 24PPM: AR-337 27PPM: AR-407 33PPM: AR-507 (8.5" x 11 continuous scanning of same page)
Page order of multipage documents	1 – N
Optical Resolution	400dpi
Output Resolution	200,300,600dpi
Scaling	–
Output Mode	1bit
Halftoning Process (Dithering Method)	– Error Diffusion (200/300/600dpi) – TIFF6.0:CCITT (G.3/G.4 Single/Multipage TIFF Uncompressed TIFF) – PDF (G.3/G.4)
Duplex	Yes
Destinations (Integrations)	– Scan to desktop(FTP) → Desktop distribution scan – Scan to file server(FTP) → File server storage scan – Scan to e-mail(SMTP) → E-mail distribution scan
User Interface (Control Panel)	LCD Touch Panel (400 × 256 dots)
Client PC	Windows95/98/NT Windows2000
Web Browser	– Internet Explorer4.0 or later – Netscape Navigator4.0 or later
Embedded Web Server	Yes (Embedded)
Network Protocols	TCP/IP
Network protocols (Mail system)	SMTP
LAN Connectivity	10Base-T 100Base-TX
Client Software	Sharpdesk
Attached file type	TIFF, PDF

Item	Scanner expansion kit
e-mail System	<b>SMTPcomplying e-mail system</b> For major mail systems, SLA is under investigation. – MS Exchange – Lotus Notes – Novell GroupWise
Specify the Sender (Setting "From" field)	No
Destination Profile Setting (No. of destinations)	About 100
Scan Profile Setting	Changeable by the operation panel of the machine.
Subject & Text (Mail title and text/Scan to e-Mail)	Initial setting: 7 languages of the same contents <b>E-MAIL title</b> Title can be entered.

## B. Features and functions

### (1) Image file distribution

The network scanner system allows to send files of scanned image data to each destination through the network.

- E-mail distribution scan: As attached TIFF or PDF files
- Desktop distributions can
- File server storage scan: Hyper link is simultaneously transmitted by e-mail.

#### a. E-mail distribution scan

This system scans documents directly for the SMTP e-mail system. The scanned document is treated as an attached MIME file and distributed to the receiver through the e-mail system.

#### b. Desktop distribution scan

The network scanner sends back documents directly to the user's desktop. At that time, the desktop application, Sharpdesk is automatically started. Use of Sharpdesk allows view and correction of images, attachment of notes, edition, save of documents, and conversion into the PDF type. Furthermore, it allows scanning, printing, transmission functions (e-mail, FAX), binding of documents, and starting of other application by using the user interface. It also allows setup of image correction options.

#### c. File server storage scan

Use of this system allows direct scanning of documents for FTP servers.

This system controls transfer by using the user ID, the password, and the directory information. The user may save the scanned files as one file or plural files in the filer server. The user may also assign an e-mail address to receive the hyperlink.

### (2) Image file generation

This network scanner generates images in some industrial standard formats. The file type, the resolution, and the mode can be changed. The following file types are supported.

- TIFF (Non-compressed, or compressed G3/G4 type)
- Image PDF (Compressed G3/G4 type)

## C. Additional licenses of Sharpdesk and Network Scanner

The user may purchase additional licenses of Sharpdesk in the following units:

- 1 user
- 5 users

## D. Requirements for composition of the network system

To use the network scanner, the following components are or configuration is required.

- AR-287/337/407/507
- Network scanner expansion kit: AR-NS1
- Printer controller: AR-PB2A
- NIC: AR-NC3D
- Memory: (AR-SM1 x 2)

## 26. E-mail Status/E-mail Alerts

### A. Basic functions

- (1) Event driven type text message transmission by using MIB information of AR-PB2A
- (2) Management information which body has is coded and transmitted in a file type according to the schedule or in the event driven type. In this case, the specified mail software is used to receive and develop the data.

The above functions are available as standard provision only when AR-PB2A and the AR-NC3D are installed. For (2), the software key protect is made.

### B. Main body specifications

The body provides event information to the controller.

The file generated by the ICU according to setup can be transmitted as an attached file as information for dealers. When a dealer's mail address is set, a file can be attached only to a mail which is transmitted to the mail address.

To read the attached file, the specified mail software is required. That is, the attached file includes numeral information of each main body and event information in coded state. If the other mail software is used to receive, the display contents on the client side cannot be guaranteed.

#### (2) Alert Message

ID	Event	Message	Condition
1	Paper Jam	!!! MISFEED HAS OCCURRED !!!	When paper/document jam has occurred. If a jam is detected when the power is turned ON or reset, checking is made again.
2	Toner Low	!!! TONER SUPPLY IS LOW !!!	When toner LOW is detected for the first time. If toner LOW is detected when the power is turned ON or reset, checking is made again.
3	Toner Empty	!!! ADD TONER !!!	When toner empty is detected for the first time. If toner empty is detected when the power is turned ON or reset, checking is made again.
4	Paper Empty	!!! LOAD PAPER / XXX !!!	When paper empty is detected for the first time. If paper empty is detected when the power is turned ON or reset, checking is made again. No information on the number of steps of trays. Manual feed is not supported. When a tray empty is detected, information of all the trays that are empty at that time is delivered.
5	Service Required	!!! CALL FOR SERVICE !!!	When the machine enters the self-diagnosis mode. If detected when the power is turned ON or reset, checking is made again.
6	PM Required	!!! MAINTENANCE REQUIRED !!!	When the maintenance counter or the developer counter reaches the specified count. If detected when the power is turned ON or reset, checking is made again.

#### (3) Status Message

##### a. Counter information

When schedule driven is set, the total counter, the copy counter, and the printer counter are displayed in a mail address for general. These information items are supplied from the controller MIB. The "total counter" means the "effective paper counter" controlled by the ICU.

##### b. Timer information

For schedule drive message, the controller controls transmission time by means of the timer of the ICU timer of the machine, and transmits a mail.

Timer setup is made from the Web setup page.

### C. Print controller specifications

The controllers, AR-PB2A, support the following transmission functions:

- Text mail transmission by event driven setup and schedule driven setup
- Mail transmission with an attached file by event driven setup and schedule driven setup.

However, mail transmission with an attached file stated above is enabled only when the main body complies with generation of information of the attached file. That is, transmission of an attached file can be made only when the AR-PB2A is installed to the AR-287/337/407/507.

For E-mail Status / Alerts without an attached file, as follows:

#### (1) Additional machine information

Information to identify the machine. The user administrator manually enters this information by using a browser. The information is displayed in the text of the mail.

\* These items of information are kept on the controller side or on the NIC side.

- Machine name
- Machine code
- Installation place

### D. Handling of transmission data

In E-mail Alerts and E-mail Status, a transmission task is generated regardless of the job which is under process in the machine. These tasks are processed in the following rules:

- When the machine receives a mail transmission request during a job process (copy scan, copy output, print output, other process) of the machine, it performs transmission process regardless of the job.
- When the machine receives a mail transmission request under other situation, if the job is triggered during transmission process, the job is started.
- When the machine receives a mail transmission request during the simulation mode, the request is accepted and transmission process is started.
- When the machine receives a mail transmission request during the key operator program, it is accepted and transmission process is started.
- When the controller sends two or more requests during a job, only the last request is accepted.



### [3] CONSUMABLE PARTS (AR-287/337/407)

#### 1. Consumable Parts List

##### A. USA

###### AR-287/337

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	Lower Heat Roller Kit	Lower Heat Roller                   ×1 Fusing Separation Pawl (lower)   ×2	160K	AR-505LH	Replacement of fusing separation pawl for every 90 K should be done using those supplied separately.
12	Lower Heat Roller	Lower Heat Roller                   ×1	160K	AR-505HR	

###### AR-407

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	Lower Heat Roller Kit	Lower Heat Roller                   ×1 Fusing Separation Pawl (lower)   ×2	180K	AR-505LH	Replacement of fusing separation pawl for every 90 K should be done using those supplied separately.
12	Lower Heat Roller	Lower Heat Roller                   ×1	180K	AR-505HR	

##### B. Canada

###### AR-287/337

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	160K PM Kit	Upper Heat Roller                   ×1 Lower Heat Roller                   ×1 Toner Receiving Seal               ×1 DV Seal                               ×1 Heat Roller Gear                   ×1	160K	AR-337KB	
12	Lower Heat Roller	Lower Heat Roller                   ×1	160K	AR-505HR	

###### AR-407

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	180K PM Kit	Upper Heat Roller                   ×1 Lower Heat Roller                   ×1 Toner Receiving Seal               ×1 DV Seal                               ×1 Heat Roller Gear                   ×1	180K	AR-337KB	
12	Lower Heat Roller	Lower Heat Roller                   ×1	180K	AR-505HR	

##### C. Europe / U.K. / Australia / New Zealand

###### AR-287/337

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	160K PM Kit	Upper Heat Roller                   ×1 Lower Heat Roller                   ×1 Toner Receiving Seal               ×1 DV Seal                               ×1 Heat Roller Gear                   ×1	160K	AR-337KB	
12	Lower Heat Roller	Lower Heat Roller                   ×1	160K	AR-505HR	

###### AR-407

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	180K PM Kit	Upper Heat Roller                   ×1 Lower Heat Roller                   ×1 Toner Receiving Seal               ×1 DV Seal                               ×1 Heat Roller Gear                   ×1	180K	AR-407KB	
12	Lower Heat Roller	Lower Heat Roller                   ×1	180K	AR-505HR	

##### D. Asia / Middle & South America

###### AR-287/337

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	160K PM Kit	Upper Heat Roller                   ×1 Lower Heat Roller                   ×1 Toner Receiving Seal               ×1 DV Seal                               ×1 Heat Roller Gear                   ×1	160K	AR-337KB	
12	Lower Heat Roller	Lower Heat Roller                   ×1	160K	AR-505HR	

###### AR-407

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	180K PM Kit (200V)	Upper Heat Roller                   ×1 Lower Heat Roller                   ×1 Toner Receiving Seal               ×1 DV Seal                               ×1 Heat Roller Gear                   ×1	180K	AR-407KB	
12	Lower Heat Roller	Lower Heat Roller                   ×1	180K	AR-505HR	

## E. Middle East / Africa

### AR-287/337

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	160K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1	160K	AR-337KB	
12	Lower Heat Roller	Lower Heat Roller ×1	160K	AR-505HR	

### AR-407

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
5	180K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1	180K	AR-407KB	
12	Lower Heat Roller	Lower Heat Roller ×1	180K	AR-505HR	

## [7] SIMULATION (AR-287/337/AR-407/507)

### B. List

Code		Function (Purpose)
Main	Sub	
8	1	Used to check and adjust the operation of the developing bias voltage in each print mode and the control circuit. (for OPC drum type B)
	2	Used to check and adjust the operation of the main charger grid voltage in each print mode and the control circuit. (for OPC drum type B)
	6	Used to check and adjust the transfer charger current and the control circuit.
	7	Used to check and adjust the operation of the separation charger voltage and its control circuit.
22	1	Used to check the print out count of each section in each operation mode. (Used to check the maintenance timing.)
	6	Used to output the list of the setting and adjustment data (simulations, counters).
26	10	Used to allow entry of the software key input for the network scanner.
	12	Used to enter the Diagnosis function key input.
	13	After completion of copier job in copier interruption during a printer job, the print job is resumed in synchronization with the auto clear timer (key operation) setup time [10-240]. By making the setup below, the print job is resumed in 0 sec. (However, the auto clear function is enabled with the setup time of key operation. Also, this simulation and auto clear are not synchronized.)
	22	Used to set the specification (language display) for the destination. (Excluding the Japan models.)
	32	When the variable speed fan motor is in the ready state and the process temperature is in the range of 36° – 45°, the PWM duty is set in percentage.
	44	Used to set the model of the unit which is connected to the SCSI I/F of ICU PWB.
50	52	Used to set whether white paper discharge count up is performed or not. ("White paper" means insertion paper in the OHP insertion paper mode (without copy), cover paper in the cover paper insertion mode (without copy)/back cover, and white paper in the duplex exit mode (CA etc.).)
	1	Used to adjust the copy image position and the void area (image loss) on the print paper in the copy mode. (The same adjustment can be made with SIM 50-2 (simple method).)
	2	Used to adjust the copy image position and the void area (image loss) on the print paper in the copy mode. (Simple adjustment) (This simulation allows the same simulation with SIM 50-1 more simply.)
	26	Used to set the folding margin of center binding.
51	3	Used to set the clutch OFF time. (AR-507 Europe and U.K. only)
61	2	Used to adjust the scanner (exposure) laser power (absolute value) in the copy mode.
	4	Used to adjust the scanner (exposure) laser power (absolute value) in the printer mode. (For Photoconductor type B)
67	18	Used to clear the application data area of the Network Scanner of the Flash ROM.

### C. Details of simulations

8

8 - 1

Purpose	Adjustment/Operation test/check
Function (Purpose)	Used to check the operation of the developing bias voltage in each print mode and its control circuit. (For OPC drum type B)
Section	Process (OPC drum, developing unit, transfer, cleaning) section

Operation/ Procedure (The developing bias output voltage of each print mode can be adjusted and checked.)

1. Select the print mode with [↑] key and [↓] key.
2. Enter the adjustment value with the 10-key pad.
3. Press the [EXECUTE] key.

The [EXECUTE] key is highlighted, the adjustment value entered in procedure 2 is set, and the voltage corresponding to the set value is supplied.

After supplying the voltage for 30 sec, the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed while the voltage is supplied, the voltage output is stopped and the [EXECUTE] key returns to the normal display.

AUTO	: Auto mode	* (500) (–500V ±5V)
CHARA	: Character mode	* (500) (–500V ±5V)
CHARA PHOTO	: Character/Photo mode	* (500) (–500V ±5V)
PHOTO	: Photo mode	* (500) (–500V ±5V)
PRINTER	: Printer mode	* (500) (–500V ±5V)
PLUS	: Cleaning mode	* (150) (+150V ±5V)

Developing bias voltage

\* ( ): Default

(AR-287/337/407)

(AR-507)

AUTO	: Auto mode	* (415) (–425V ±5V)
CHARA	: Character mode	* (490) (–500V ±5V)
CHARA PHOTO	: Character/Photo mode	* (490) (–500V ±5V)
PHOTO	: Photo mode	* (490) (–500V ±5V)
PRINTER	: Printer mode	* (490) (–500V ±5V)
PLUS	: Cleaning mode	* (165) (+150V ±5V)

Developing bias voltage

\* ( ): Default

**8 - 2**

Purpose	Adjustment/Operation test/check
Function (Purpose)	Used to check and adjust the operation of the main charger grid voltage in each print mode and the control circuit. (for OPC drum type B)
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)
Operation/Procedure	(The charging/grid output voltage in each print mode can be adjusted and checked.)

1. Select the print mode with [↑] key and [↓]key.
2. Enter the adjustment value with the 10-key pad.
3. Press the [EXECUTE] key.

The [EXECUTE] key is highlighted, the adjustment value entered in procedure 2 is set, and the voltage corresponding to the set value is supplied.

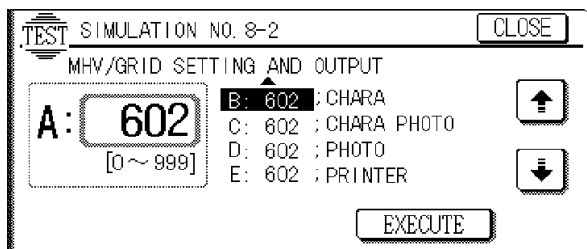
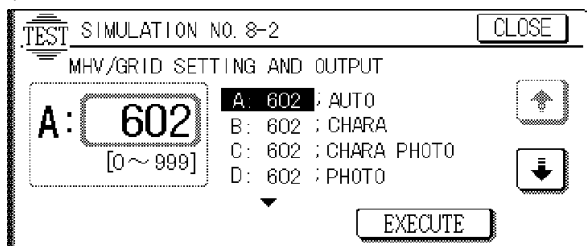
After supplying the voltage for 30 sec, the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed while the voltage is supplied, the voltage output is stopped and the [EXECUTE] key returns to the normal display.

(AR-287/337/407)

AUTO	: Auto mode	* (602) (−603 ±5V)
CHARA	: Character mode	* (602) (−603 ±5V)
CHARA PHOTO	: Character/Photo mode	* (602) (−603 ±5V)
PHOTO	: Photo mode	* (602) (−603 ±5V)
PRINTER	: Printer mode	* (602) (−603 ±5V)

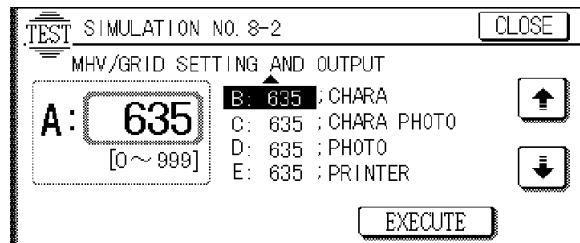
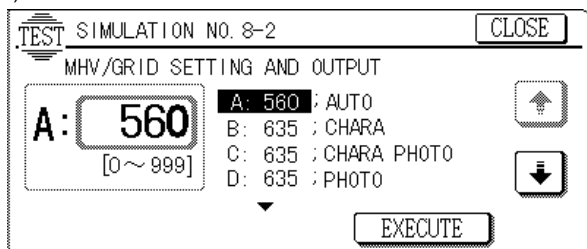
\* ( ) : Default



(AR-507)

AUTO	: Auto mode	* (560) (−570 ±5V)
CHARA	: Character mode	* (635) (−645 ±5V)
CHARA PHOTO	: Character/Photo mode	* (635) (−645 ±5V)
PHOTO	: Photo mode	* (635) (−645 ±5V)
PRINTER	: Printer mode	* (635) (−645 ±5V)

\* ( ) : Default

**8 - 6**

Purpose	Adjustment/Operation test/check
Function (Purpose)	Used to check and adjust the transfer charger current and the control circuit.
Section	Image process Copy (Photoconductor/ Developing/Transfer/ Cleaning)
Operation/Procedure	The transfer charger output voltage in printing the front and the back of paper can be adjusted and checked.

1. Select the print mode with [↑] key and [↓] key.
2. Enter the adjustment value with the 10-key pad.
3. Press the [EXECUTE] key.

The [EXECUTE] key is highlighted, the adjustment value entered in procedure 2 is set, and the voltage corresponding to the set value is supplied.

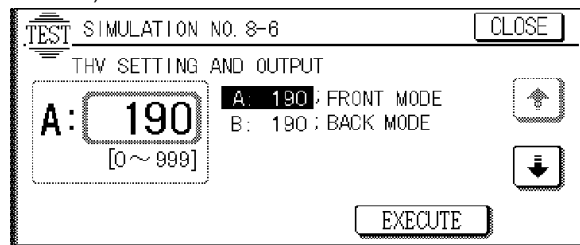
After supplying the voltage for 30 sec, the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed while the voltage is supplied, the voltage output is stopped and the [EXECUTE] key returns to the normal display.

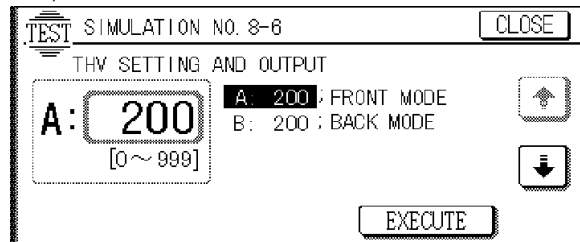
**FRONT MODE:** Front surface print (with the paper feed tray and manual paper feed tray)

**BACK MODE:** Back surface print (with duplex paper feed)

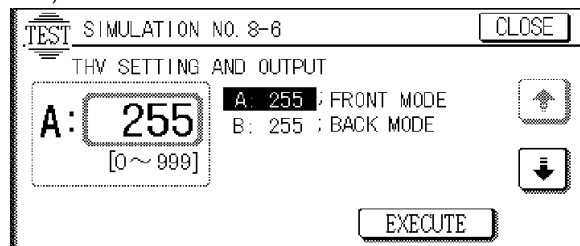
(AR-287/337)



(AR-407)



(AR-507)



**8 - 7**

Purpose	Adjustment/Operation test/check
Function (Purpose)	Used to check and adjust the operation of the separation charger voltage and its control circuit.
Section	Image process Others (Photoconductor/ Developing/Transfer/ Cleaning)
Operation/ Procedure	The separation charger output voltage in printing the front and the back of paper can be adjusted and checked.

1. Select the print mode with [↑] key and [↓] key.
2. Enter the adjustment value with the 10-key pad.
3. Press the [EXECUTE] key.

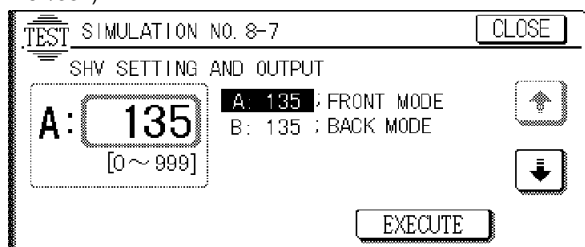
The [EXECUTE] key is highlighted, the adjustment value entered in procedure 2 is set, and the voltage corresponding to the set value is supplied.

After supplying the voltage for 30 sec, the [EXECUTE] key returns to the normal display.

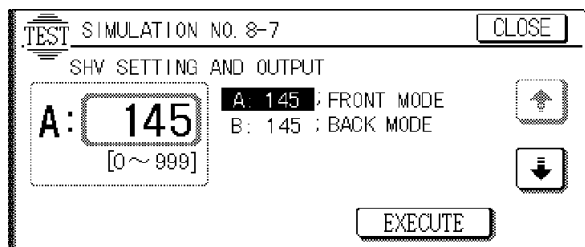
If the [EXECUTE] key is pressed while the voltage is supplied, the voltage output is stopped and the [EXECUTE] key returns to the normal display.

**FRONT MODE:** Front surface print (with the paper feed tray and manual paper feed tray)

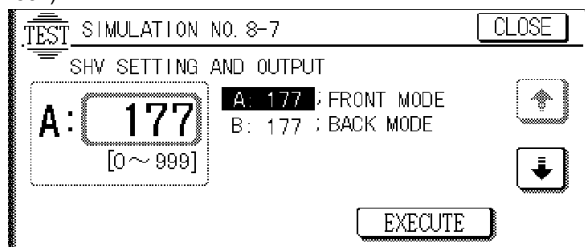
**BACK MODE:** Back surface print (with duplex paper feed)  
(AR-287/337)



(AR-407)



(AR-507)

**22****22 - 1**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the print out count of each section in each operation mode. (Used to check the maintenance timing.)

Item	Counter
Operation/ Procedure	

nnnnnnnn : Counter value

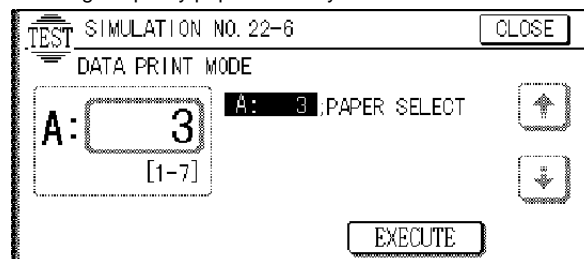
**22 - 6**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to output the list of the setting and adjustment data (simulations, counters).
Item	Data Adjust/Setting data
Operation/ Procedure	When installing or servicing, execute this simulation to print and store the adjustment values and setting data for use in the next servicing. (Memory trouble, PWB replacement, etc.) In this case, the print conditions can be set optionally.

1. Select the setup item.  
(The selected item is highlighted.)
2. Set the item and conditions with the 10-key pad.
3. Press the [EXECUTE] key to print various data.

A: Paper feed mode

- 1: Manual paper feed
- 2: Upper paper feed tray
- 3: Lower paper feed tray
- 4: Desk upper paper feed tray
- 5: Desk middle paper feed tray
- 6: Desk lower paper feed tray
- 7: Large capacity paper feed tray

**26****26 - 10**

Purpose	Setting
Function (Purpose)	Used to allow entry of the software key input for the network scanner.
Item	Operation
Operation/ Procedure	1. After entering the sub code of the simulation, enter the software key in the obtained frame of "NEW."

2. When the obtained number is entered with the 10-key (max. 9 digits), the entered number is displayed in the frame of "NEW." After entering the number, press the [OK] key, and the entered number is stored.
3. Reset with the CA key, and the scanner function is enabled.  
\* Only when SCSI (20 channels/NS1) setup is completed.  
If the scanner key input is made without setup, it is rejected.
4. Special note

When the SCSI channel is set to "20," if a software key which does not correspond to the setup is entered, the setup of "20" is changed to "1."

**26 - 12**

Purpose	Setting
Function (Purpose)	Used to enter the Diagnosis function key input.
Item	Operation
Operation/Procedure	1. After entering the sub code of the simulation, enter the software key in the obtained frame of "NEW."

- When the obtained number is entered with the 10-key (max. 9 digits), the entered number is displayed in the frame of "NEW." After entering the number, press the [OK] key, and the entered number is stored.
- The Alert/Status E-Mail send function with attached data of the Remote E-Mail Diagnosis System is enabled.

**26 - 13**

Purpose	Setting
Function (Purpose)	After completion of copier job in copier interruption during a printer job, the print job is resumed in synchronization with the auto clear timer (key operation) setup time [10-240]. By making the setup below, the print job is resumed in 0 sec. (However, the auto clear function is enabled with the setup time of key operation. Also, this simulation and auto clear are not synchronized.)
Item	Operation
Operation/Procedure	When this simulation is executed, the current set value is displayed. At that time, the set value can be changed with the 10-key. When the [OK] key is pressed, the current set value is stored in the EEPROM.

**26 - 22**

Purpose	Setting
Function (Purpose)	Used to set the specification (language display) for the destination. (Excluding the Japan models.)
Item	Specifications
Operation/Procedure	Select the language to be used according to the table below.

Display	Language
ENG.(US)	English(US)
ENG.(UK)	English(UK)
FRENCH	French
SPANISH	Spanish
GERMAN	German
ITALIAN	Italian
SWEDISH	Swedish
DUTCH	Dutch

**26 - 32**

Purpose	Setting
Function (Purpose)	When the variable speed fan motor is in the ready state and the process temperature is in the range of 36° – 45°, the PWM duty is set in percentage.
Item	Operation
Operation/Procedure	When this simulation is executed, the current set value is displayed. At that time, select the fan motor with [↑] key and [↓] key. Then the set value can be changed with the 10-key.

When [↑] key or [↓] key is pressed, the current set value is stored in the EEPROM.

VFM1&2&4	Adjustment range of 50 – 100% in 1% increment
PCFM VFM5&6	Adjustment range of 50 – 100% in 1% increment

**26 - 44**

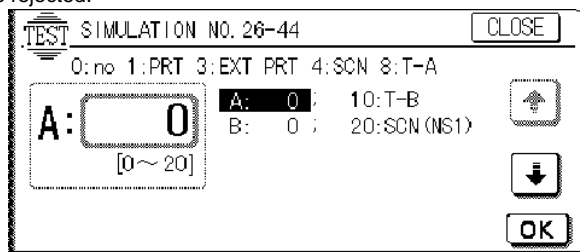
Purpose	Setting
Function (Purpose)	Used to set the model of the unit which is connected to the SCSI I/F of ICU PWB.
Section	ICU
Item	Specifications Interface/Communication
Operation/Procedure	A is at the left of B when viewed from the rear side. 0: No connection 1: Printer controller 3: External printer controller

- 4: AXIS controller
- 8: Tandem connection (Initiator)
- 10: Tandem connection (Target)
- 20: Network scanner controller (NS1)

Either of the above values is set.

\* AR-287 is not provided with the tandem setting.

However, the display is not changed. When tandem setup is tried, it is rejected.



## 26 - 52

Purpose	Setting
Function (Purpose)	Used to set whether white paper discharge count up is performed or not. ("White paper" means insertion paper in the OHP insertion paper mode (without copy), cover paper in the cover paper insertion mode (without copy)/back cover, and white paper in the duplex exit mode (CA etc.).)
Item	Operation
Operation/ Procedure	When this simulation is executed, the current set value is displayed.

Under this state, the set value can be changed with the 10-key.

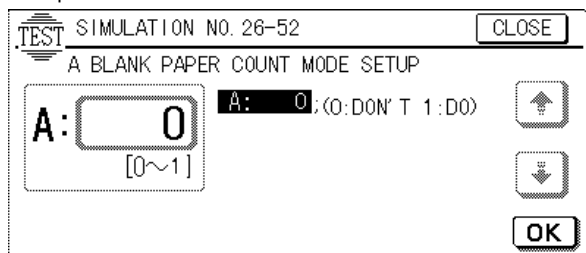
When the OK key is pressed, the currently set value is stored in the EEPROM.

	Set value	Content
A	0	White paper count up is not performed.
	1	White paper count up is performed.

Destination	Default
Japan/Australia	0 (Count up is not performed.)
Others	1 (Count up is performed.)

When set to 0 (count up is not performed), the following counters do not count up.

- COPIES counter
- Total counter
- Maintenance counter
- Developer counter
- Department management counter
- The signal (PNC) for the external auditor (mechanism counter) is not outputted.



## 50

### 50 - 1

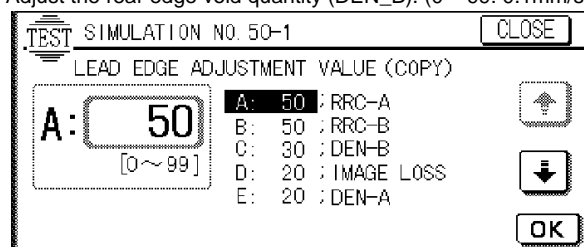
Purpose	Adjustment
Function (Purpose)	Used to adjust the copy image position and the void area (image loss) on the print paper in the copy mode. (The same adjustment can be made with SIM 50-2 (simple method).)
Item	Picture quality      Image position
Operation/ Procedure	1. Select the adjustment item with [↑], [↓] keys. 2. Enter the adjustment value with the 10-key. 3. Press the [OK] key. (The adjustment value entered in procedure 2 is set.)

#### Descriptions on adjustment items

- A. Document scan start position adjustment value (RRC-A)  
Used to adjust the timing of outputting the image lead edge signal (SCAN signal) after starting document scanning. (0 – 99: Reference value 50)
- B. Resist roller clutch OFF timing adjustment value (RRC-B)  
Used to adjust the timing of turning ON the resist roller after reception of the resist signal (LD\_START). (0 – 99: Reference value 50)
- C. Rear edge void quantity adjustment value (DEN-B)  
Used to set the void quantity on the rear edge. (0- 99: Reference value 30)
- D. Image loss quantity set value (IMAGE LOSS)  
Used to set the image loss quantity. (0 – 99: reference value 20)
- E. Lead edge void quantity set value (DEN-A)  
Used to set the void quantity on the document lead edge. (0 – 99: Reference value 20)

#### Adjustment procedure

1. Set the image loss quantity (IMAGE LOSS) and the paper lead edge void quantity (DEN-A) to desired values. (0 – 99: 0.1mm/step)
2. Adjust the document scan start position (RRC\_A) so that the image loss quantity of an actual copy image becomes the set value of procedure 1. (0 – 99: 0.29mm/step)
3. Adjust the resist roller clutch ON timing (RRC\_B) so that the lead edge void quantity of an actual copy image becomes the set value of procedure 1. (0 – 99: 0.24mm/step)
4. Adjust the rear edge void quantity (DEN\_B). (0 – 99: 0.1mm/step)



### 50 - 2

Purpose	Adjustment
Function (Purpose)	Used to adjust the copy image position and the void area (image loss) on the print paper in the copy mode. (Simple adjustment) (This simulation allows the same simulation with SIM 50-1 more simply.)
Item	Picture quality      Image position
Operation/ Procedure	1. Select the adjustment item with [↑], [↓] keys. 2. Enter the adjustment value with the 10-key.

3. Press the [OK] key. (The value entered in procedure 2 is set.)

Used to adjust the lead edge by entering the lead edge shift on each lead edge of 400% copy.

**Descriptions on adjustment items**

- A. Distance from the image lead edge to 10mm of the scale (Platen 400%) (L1)  
 B. Distance from the paper lead edge to the image lead edge (L2)  
 C. IMAGE LOSS  
 D. DEN-A  
 E. DEN-B

**Adjustment procedures**

- Set the image loss quantity (IMAGE LOSS) and the paper lead edge void quantity (DEN-A) to desired values. (0 – 99: 0.1mm/step)
- Set L1/L2 to 0.
- Make a 400% copy with OC, and enter the shift quantity to L1/L2. (0 – 999: 0.1mm/step)
- Repeat procedure 3 so that the paper lead edge void quantity of the actual copy image becomes the set value of procedure 1.
- Adjust the rear edge void quantity (DEN\_B). (0 – 99: 0.1mm/step)

**50 - 26**

Function (Purpose)	Used to set the folding margin of center binding.
Operation/ Procedure	When this simulation is executed, the current set value is displayed. Under this state, the set value can be changed with the 10-key. When the OK key is pressed, the currently set value is stored in the EEPROM.

(1 step: 0.1mm)

Item	Content	Range	Default
A	Clear quantity of the folding section of center binding left image (when the OC is used)	0 ~ 99	20
B	Clear quantity of the folding section of center binding right image (when the OC is used)	0 ~ 99	30
C	Clear quantity of the folding section of center binding left image (when the RSPF is used)	0 ~ 99	0
D	Clear quantity of the folding section of center binding right image (when the RSPF is used)	0 ~ 99	0

(AR-287/337/407)

(AR-507)

**51****51 - 3**

Purpose	Setting
Function (Purpose)	Used to set the clutch OFF time. (AR-507 Europe and U.K. only)
Item	Operation
Operation/ Procedure	When this simulation is executed, the current set value is displayed.

At that time, the set value can be changed with [↑] key and [↓] key.  
 When [↑], [↓], and [OK] keys are pressed, the current set value is stored in the EEPROM.

	Destination	Default
TRC2	Europe	80
	U.K.	80
TRC1H	Europe	60
	U.K.	60

(Europe/U.K.)

**61****61 - 2**

Purpose	Adjustment
Function (Purpose)	Used to adjust the scanner (exposure) laser power (absolute value) in the copy mode.
Section	Laser (Exposure)
Item	Operation
Operation/ Procedure	(AR-287/337) All must be set to "8."



(AR-407)

All must be set to "6".

TEST SIMULATION NO. 61-2 CLOSE

LASER POWER VALUE SET (COPY)

A: 6 [1~11] A: 6 ; AE2

B: 6 ; CH2

C: 6 ; CH-P2

D: 6 ; PH2

OK

(AR-507)

All must be set to "5".

TEST SIMULATION NO. 61-2 CLOSE

LASER POWER VALUE SET (COPY)

A: 5 [1~11] A: 5 ; AE2

B: 5 ; CH2

C: 5 ; CH-P2

D: 5 ; PH2

OK

**61 - 4**

Purpose	Adjustment
Function (Purpose)	Used to adjust the scanner (exposure) laser power (absolute value) in the printer mode. (For Photoconductor type B)
Section	Laser (Exposure)
Item	Operation
Operation/ Procedure	(AR-287/337) Set default value 8.

TEST SIMULATION NO. 61-4 CLOSE

LASER POWER VALUE SET (PRINTER)

A: 8 [1~11] A: 8 ;

OK

(AR-407)

Set default value 6.

TEST SIMULATION NO. 61-4 CLOSE

LASER POWER VALUE SET (PRINTER)

A: 6 [1~11] A: 6 ;

OK

(AR-507)

Set default value 5.

TEST SIMULATION NO. 61-4 CLOSE

LASER POWER VALUE SET (PRINTER)

A: 5 [1~11] A: 5 ;

OK

**67****67 - 18**

Purpose	Data clear
Function (Purpose)	Used to clear the application data area of the Network Scanner of the Flash ROM.
Item	Memory
Operation/ Procedure	1. To clear data, press the [EXECUTE] key. Clear area: 0x8f060000/0x8f07ffff

- The confirmation menu is displayed to confirm whether the AR-NS1 area data in the Flash ROM are cleared or not.  
[YES] key: Clear  
[NO] key: Not clear
- During clearing data, "NOW DOING . . ." is displayed.  
[No key entry is accepted during clearing.]
- After normal completion, "END" is outputted. In case of any trouble, "NG" is outputted.  
[When the CA key is pressed, reset is performed.]

TEST SIMULATION NO. 67-18 CLOSE

CLEAR APP. DATA AREA

ARE YOU SURE? YES NO EXECUTE





## [9] TROUBLE CODE LIST (AR-287/337/407/507)

### 1. Trouble code

Trouble code		Content of trouble	Remark	Trouble detection
CE	00	The other communication error has occurred.		Network
	01	The print server card (AR-NC3D) is not installed or defective.		Network
	02	The specified mail server or the FTP server is not found.		Network
	03	The specified server does not correspond during image transmission.		Network
	04	The entered account name of the FTP server or the password is invalid.		Network
	05	The entered directory of the FTP server is invalid.		Network

### 2. Self diagnostics

Trouble code		Description	
MAIN	SUB		
CE	00	Content	The other communication error has occurred.
		Detail	Communication error
		Cause	Network Cable connection failure
		Check and remedy	1) Check that the Network Cable is properly inserted.
	01	Content	The print server card (AR-NC3D) is not installed or defective.
		Detail	NC3D connection failure
		Cause	NC-3D is not installed to the AR-PB2A board. NC-3D control PWB trouble
		Check and remedy	1) Check that the NC-3D is installed to the AR-PB2A board. 2) Output the NIC Config. Page to check the NIC version. 3) Replace the NIC.
	02	Content	The specified mail server or the FTP server is not found.
		Detail	The specified mail server or the FTP server is not found.
		Cause	Network Cable connection failure Network setup failure SMTP server/FTP server/NST trouble
		Check and remedy	1) Check that the Network Cable is inserted properly. 2) Check that the connected network supports TCP/IP protocol. 3) Check from the Web Page that the Primary/Secondary E-mail Server Address or the Destination FTP server/Desktop PC address are properly set. 4) If the above address is described with Hostname, check that the DNS server is properly set. 5) Check that the SMTP server/FTP server/NST causes a trouble or not.
	03	Content	The specified server does not correspond during image transmission.
		Detail	The specified server does not correspond during image transmission.
		Cause	Network Cable connection failure SMTP server/FTP server/NST trouble
		Check and remedy	1) Check that the Network Cable is inserted properly. 2) Check that the SMTP server/FTP server/NST causes a trouble or not.
	04	Content	The entered account name of the FTP server or the password is invalid.
		Detail	The entered account name of the FTP server or the password is invalid.
		Cause	Network Cable connection failure The account name of the FTP server recorded as the destination or the password for the account name is erroneous.
		Check and remedy	1) Check that the Network Cable is inserted properly. 2) Check that the account name of the FTP server recorded as the destination and the password for the account name are proper.
	05	Content	The entered directory of the FTP server is invalid.
		Detail	The entered directory of the FTP server is invalid.
		Cause	Network Cable connection failure Check that the directory name exists in the FTP server recorded as the destination.
		Check and remedy	1) Check that the Network Cable is inserted properly. 2) Check that the directory name exists in the FTP server recorded as the destination.

#### CAUTION FOR BATTERY REPLACEMENT

(Danish) ADVARSEL !

Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.

Udskiftning må kun ske med batteri

af samme fabrikat og type.

Levér det brugte batteri tilbage til leverandoren.

(English) Caution !

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type

recommended by the manufacturer.

Dispose of used batteries according to manufacturer's instructions.

(Finnish) VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.

Vaihda paristo ainoastaan laitevalmistajan suosittelemaan

tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden

mukaisesti.

(French) ATTENTION

Il y a danger d'explosion s' il y a remplacement incorrect

de la batterie. Remplacer uniquement avec une batterie du

même type ou d'un type équivalent recommandé par

le constructeur.

Mettre au rebut les batteries usagées conformément aux

instructions du fabricant.

(Swedish) VARNING

Explosionsfara vid felaktigt batteribyte.

Använd samma batterityp eller en ekvivalent

typ som rekommenderas av apparattillverkaren.

Kassera använt batteri enligt fabrikantens

instruktion.

(German) Achtung

Explosionsgefahr bei Verwendung inkorrektter Batterien.

Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder

vom Hersteller empfohlene Batterien verwendet werden.

Entsorgung der gebrauchten Batterien nur nach den vom

Hersteller angegebenen Anweisungen.

# SHARP

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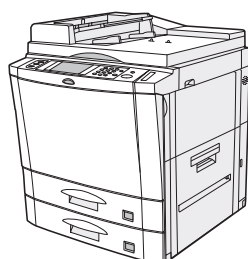
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**SHARP CORPORATION**  
**Digital Document Systems Group**  
**Quality & Reliability Control Center**  
**Yamatokoriyama, Nara 639-1186, Japan**

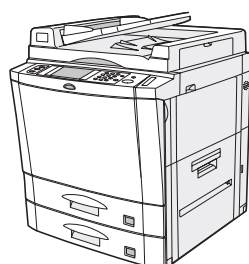
2000 April Printed in Japan

# SHARP SERVICE MANUAL

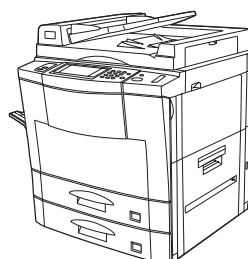
CODE: 00ZAR505//A1E



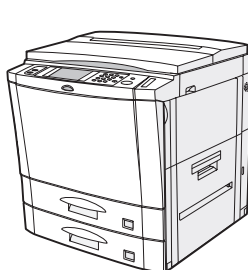
(AR-280/281)



(AR-285/286/335/336)



(AR-405)



(AR-250)



(AR-501/505)

## Digital Copier

### AR-250

### AR-280/281

### AR-285/286

### AR-335/336

### AR-405

### MODEL AR-501/505

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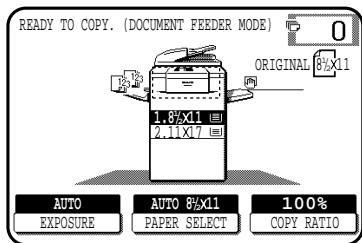
Parts marked with "△" is important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

# [1] GENERAL

## 1. Features of copying functions

### A. Touch panel

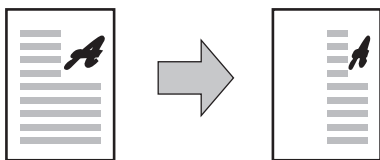
The touch panel with the back-lighted LCD simplifies various operations. It also shows operation descriptions and paper jam treatment.



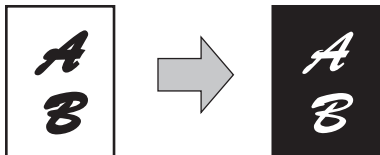
### B. Various functions of digital system

Different from the conventional analog copiers, this machine employs the digital system where the image data of a document scanned by the CCD sensor (which converts photo signals into electrical signals) are converted into digital signals. This digital system allows the independent zooming copy, black-white reversing copy, and centering copy.

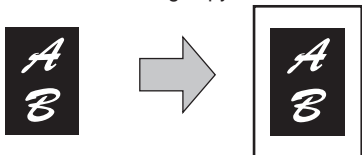
Independent zooming copy



Black-white reversing copy

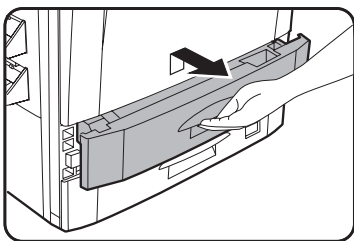


Centering copy



### C. Front loading paper tray

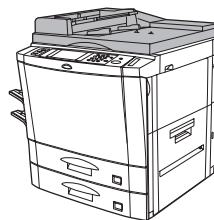
The paper trays including the two-step paper feed desk employ a front loading system to facilitate paper loading.



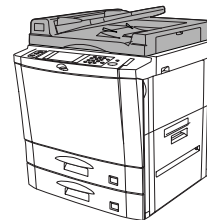
### D. Automatic document feeder as standard provision

Without opening the document table cover, documents can be automatically fed and copied.

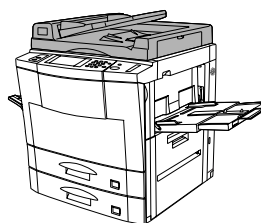
The automatic document feeder provided in the AR-280/285/286/335/336/405/501/505 allows automatic reversion of documents for duplex copying as well as simplex copying. (The automatic document feeder of the AR-280/281 allows only simplex copying.)



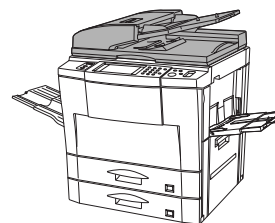
AR-280/285/335



AR-286/336



AR-405



AR-501/505

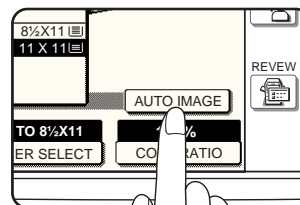
### E. Step zooming

The zooming function allows selection of the magnification ratio as follows.

	Magnification ratio	Increment	Steps
AR-280/281	25% to 200%	1%	176
AR-250/285/286/335/336	25% to 800%	1%	776
AR-405/501/505	25% to 400%	1%	376

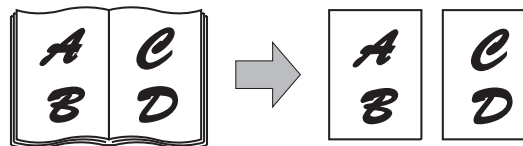
### F. Paper/magnification ratio auto selection

When the desired magnification ratio is specified, the suitable paper size is automatically selected by the original size detection function. If the copy paper size is specified, then the suitable magnification ratio is automatically selected.



### G. 1-set 2-copy

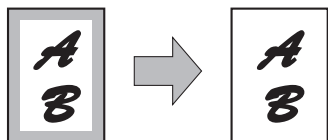
The right and the left pages of a book, etc. can be copied onto two sheets of paper continuously.





## H. Edge erase copying

Shade at the copy edge can be automatically erased.



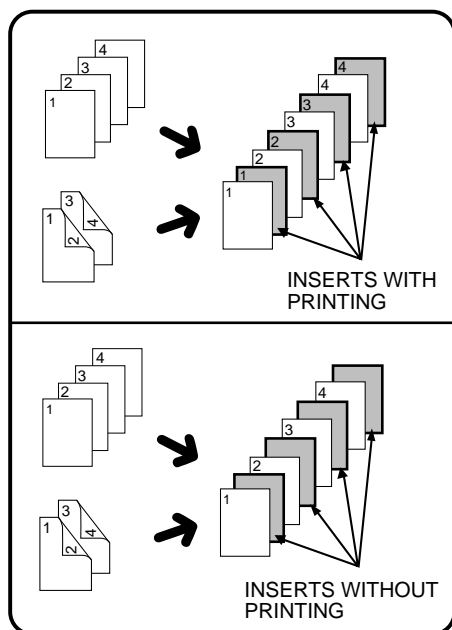
## I. Binding margin copying

Copying with binding margin can be made.



## J. Transparency film with insert sheets

When copying onto transparency film, insert sheets can be placed following each transparent sheet. The insert sheets can be processed blank or can be copied with the same image as the transparent sheets.

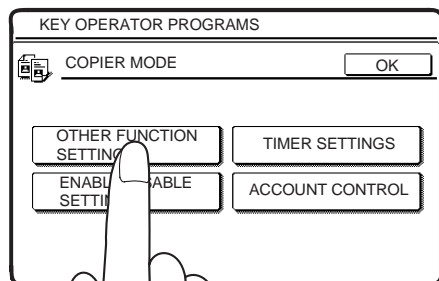


## K. Copy conditions registration/recall

Nine sets of complicated copying procedures can be stored and recalled when necessary.

## L. Key operator program

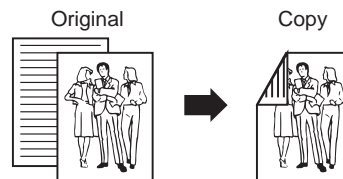
The key operator program is used by the key operator to set and cancel the customer functions.



## M. Auto duplex copy

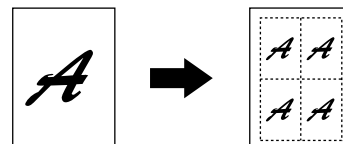
(AR-250/280/281 requires the option)

Duplex copy is made automatically.



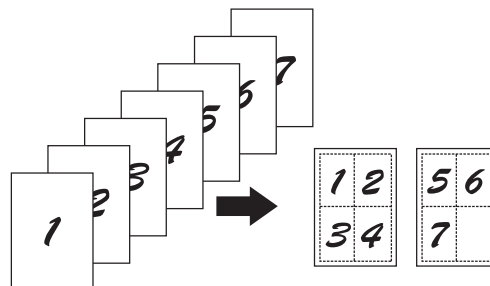
## N. REPEAT COPY

The REPEAT COPY is used to produce repeated images from an original on to a single sheet of paper. Border lines can be drawn to separate repeated images.



## O. MULTI SHOT

The MULTI SHOT function is used to copy several originals, collectively in a specified order, onto one sheet.



## P. Hi-Fi copy (AR-280/285/335 only)

This function produces high image quality copies.

## Q. DATE SIGN

The DATE SIGN function adds the current date to the copies. The date will be printed at the upper right of the copies.

## R. WATERMARK

The WATERMARK function adds a selected watermark such as "CONFIDENTIAL" and "URGENT" to the copies. The watermark will be printed in gray tone at the center of copies.

## S. SELECT STAMP

The SELECT STAMP function adds a selected string such as "CONFIDENTIAL" and "URGENT" to the copies. The string will be printed in white on a shaded background.

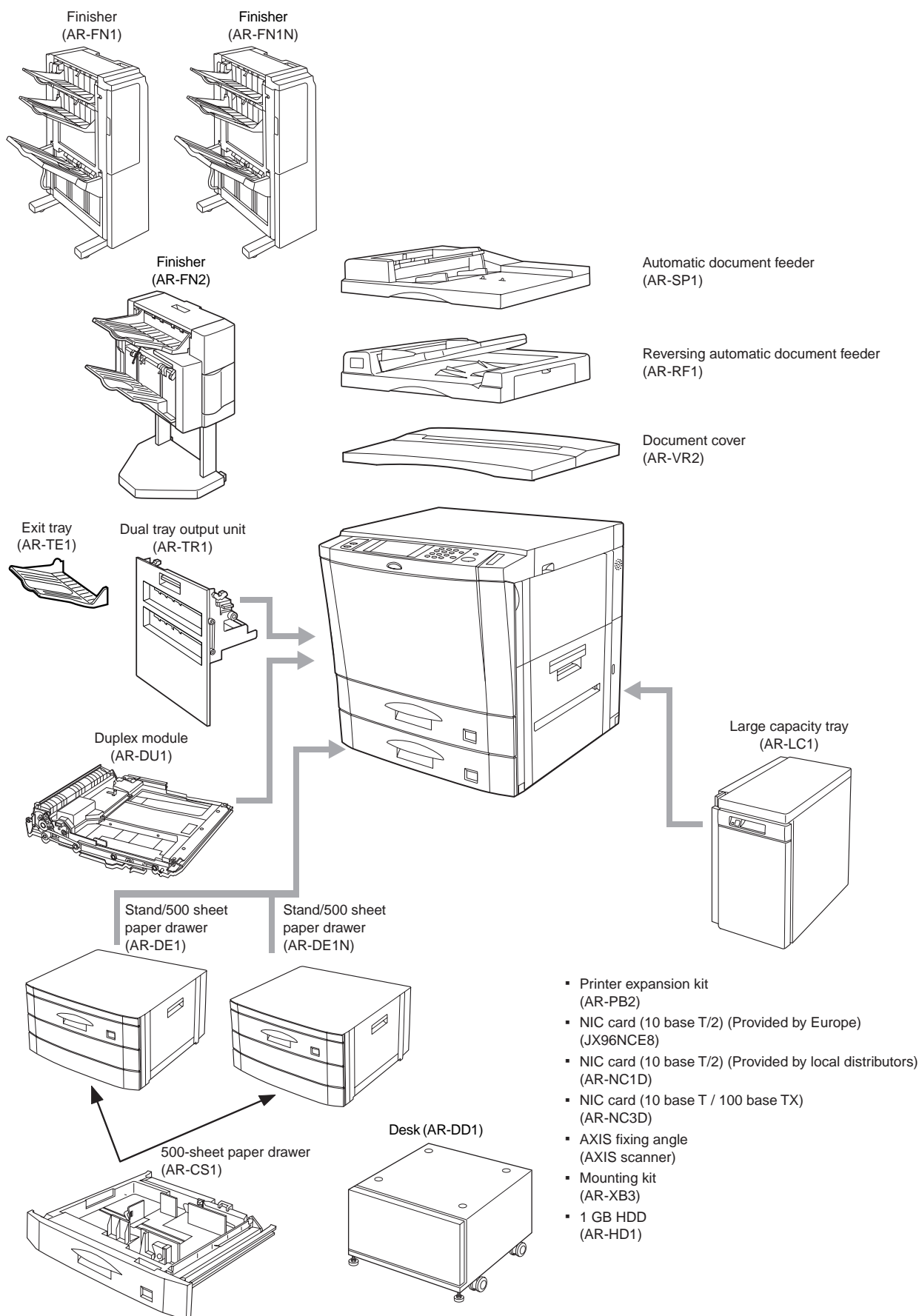
## T. PAGE NUMBER

The PAGE NUMBER function adds page numbers to the copies.

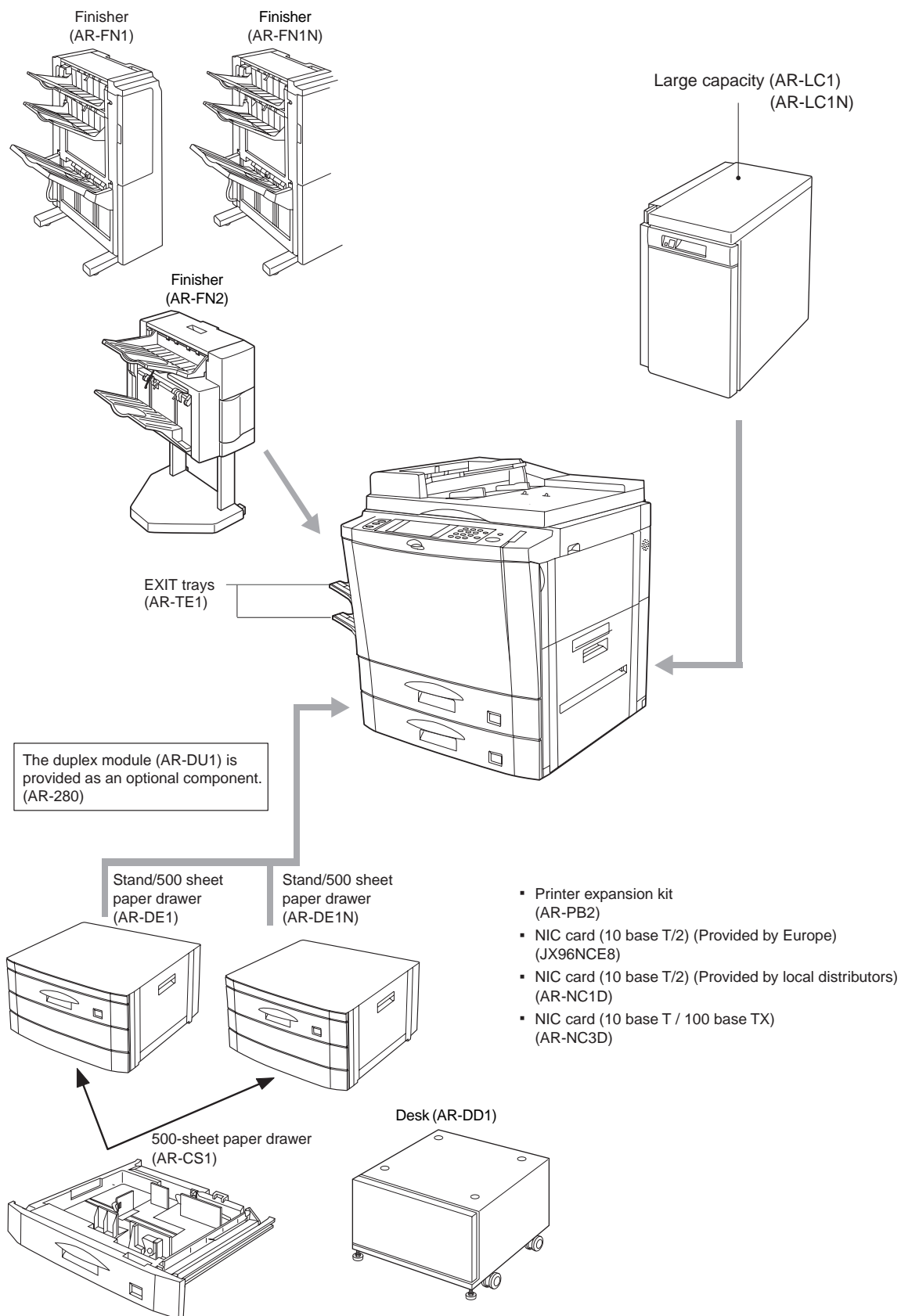
## 2. System outline (Options)

		Copier model									
Name	Model	AR-250	AR-280	AR-281	AR-285	AR-286	AR-335	AR-336	AR-405	AR-501	AR-505
Automatic document feeder	AR-SP1	○	Standard	Standard	—	—	—	—	—	—	—
	RSPF	—	—	—	—	—	—	—	—	Standard	Standard
Reversing automatic document feeder	AR-RF1	○	—	—	○	○	Standard	Standard	—	—	—
	AR-RF2	—	—	—	—	—	—	—	Standard	—	—
Stand/500 sheet paper drawer	AR-DE1	○	○	○	○	○	○	○	—	—	—
	AR-DE1N	○	○	○	○	○	○	○	○	—	—
	AR-DE7	—	—	—	—	—	—	—	—	○	○
Large capacity tray	AR-LC1	○	○	○	○	○	○	○	○	—	—
	AR-LC1N	—	○	○	○	○	○	○	○	○	—
500-sheet paper drawer	AR-CS1	○	○	○	○	○	○	○	○	—	—
	AR-CS3	—	—	—	—	—	—	—	—	○	○
Desk	AR-DD1	○	○	○	○	○	○	○	—	○	○
	AR-DD1N	—	—	—	—	—	—	—	—	—	—
2-tray paper exit unit	AR-DU1	○	○	○	—	○	—	○	—	—	—
Exit tray	AR-TE1	○	—	○	○	○	○	○	—	○	○
	AR-TE2	—	—	—	—	—	—	—	—	○	○
Dual tray output unit	AR-TR1	○	—	○	—	○	—	○	○	—	—
Finisher	AR-FN1	○	○	○	○	○	○	○	—	—	—
	AR-FN1N	○	○	○	○	○	○	○	○	—	—
	AR-FN2	○	○	○	○	○	○	○	○	—	—
	AR-FN3	—	—	—	—	—	—	—	—	○	○
Printer board	AR-PB2	○	○	○	○	○	○	○	○	—	○
	AR-SM1	—	—	—	—	—	—	—	—	—	○
NIC card (10 base T/2)	JX96NCE8	○	○	○	○	○	○	○	○	—	○
	AR-NC1D	○	○	○	○	○	○	○	—	—	○
NIC card (10 base T/100 base TX)	AR-NC3D	○	○	○	○	○	○	○	○	—	○
	AR-NC4D	—	—	—	—	—	—	—	—	—	—
AXIS fixing angle	(AXIS scanner)	○	—	○	—	○	—	○	○	—	○
1GB-HDD	AR-HD1	○	—	—	—	—	—	—	—	—	—
Mounting kit	AR-XB3	—	—	○	—	○	—	○	○	—	—
Document cover	AR-VR2	○	—	—	—	—	—	—	—	—	—
Tandem connection cable	AR-CA1	—	—	—	—	—	—	—	—	—	○

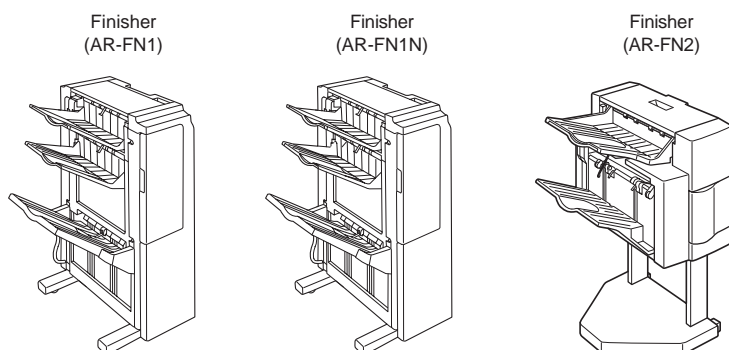
## AR-250



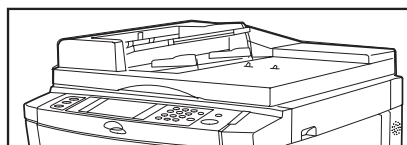
## AR-280/285/335



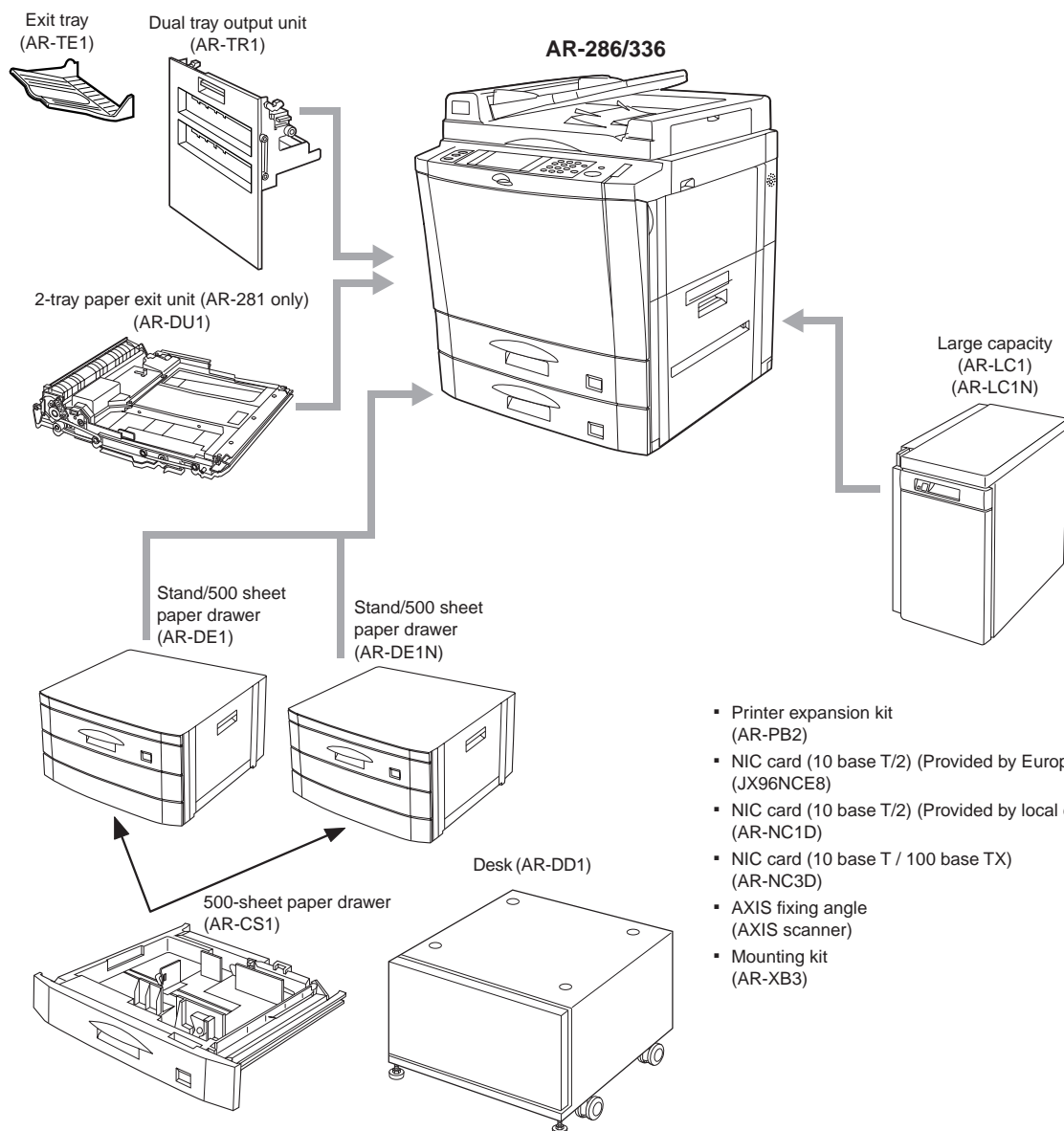
## AR-281/286/336



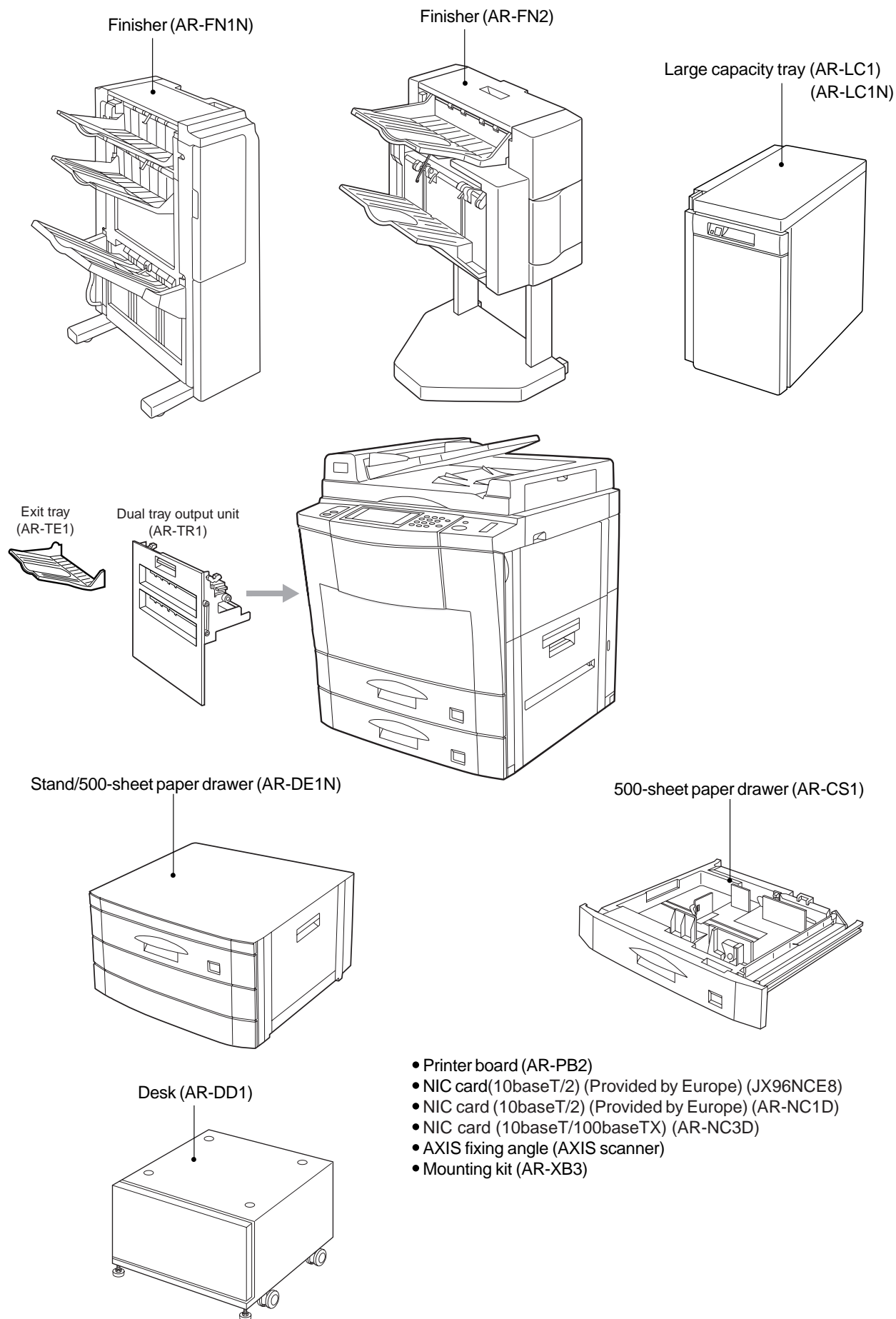
AR-281



AR-286/336

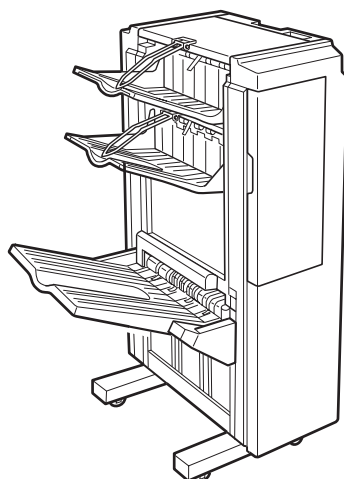


## AR-405

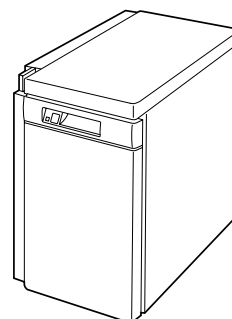
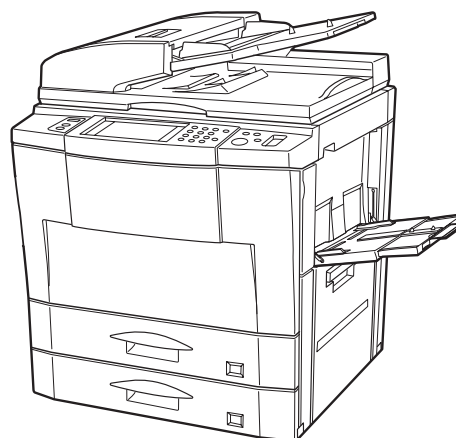
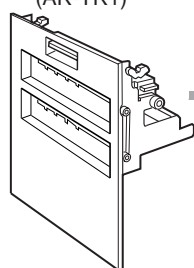


## AR-501/505

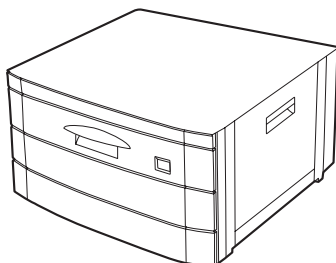
Finisher (AR-FN3)



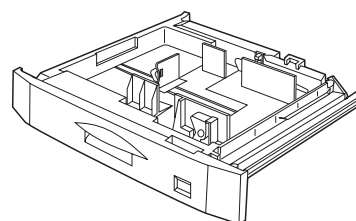
Large capacity tray (AR-LC1N)

Exit tray  
(AR-TE1)  
(AR-TE2)Dual tray output unit  
(AR-TR1)

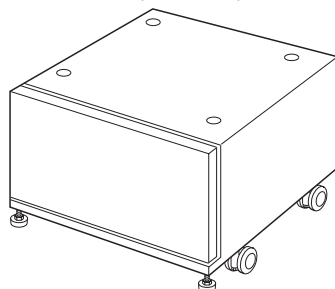
Stand/500-sheet paper drawer (AR-DE7)



500-sheet paper drawer (AR-CS3)



Desk (AR-DD1)

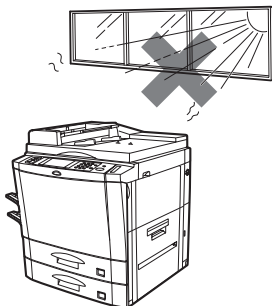
**AR-505 only**

- Printer board (AR-PB2)
- NIC card (10baseT/2) (Provided by Europe) (JX96NCE8)
- NIC card (10baseT/2) (Provided by Europe) (AR-NC1D)
- NIC card (10baseT/100baseTX) (AR-NC3D)
- Printer board (Expansion memory 16MB x2 SIM) (AR-SM1)
- AXIS fixing angle (AXIS scanner)
- Tandem connection cable (AR-CA1)

### 3. Installation requirements

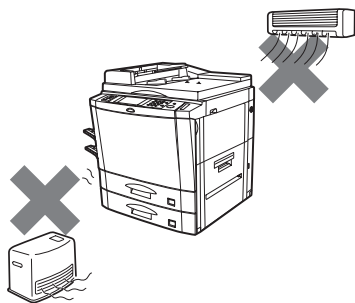
To ensure safety and proper machine performance, please note the following before initial installation and whenever the machine is to be relocated.

- 1) The copier should be installed near an accessible power outlet for easy connection.
- 2) Be sure to connect the power cord only to a power outlet that meets the specified voltage and current requirements.  
Also make certain the outlet is properly grounded.

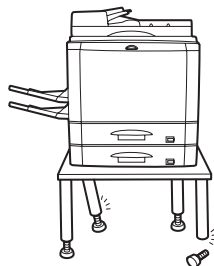


- 3) Do not install the machine where it is:

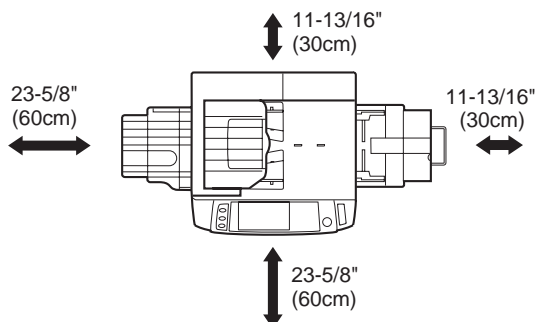
- damp or humid,
- exposed to direct sunlight,
- extremely dusty,
- poorly ventilated,
- subject to extreme temperature or humidity changes (e.g., near an air conditioner or heater).



- 4) Since a hard disk drive is built into this copier, place the copier on a firm, level surface. Choose an area which is not subject to any vibration.



- 5) Be sure to allow the required space around the machine for servicing and proper ventilation.



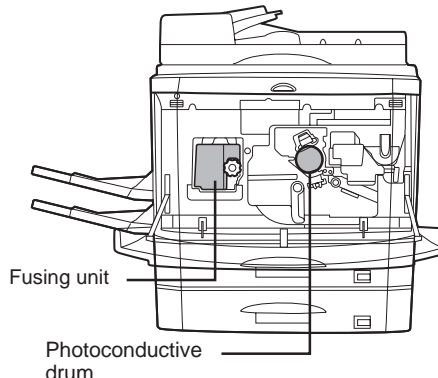
A small amount of ozone is produced within the copier during operation. The emission level is insufficient to cause any health hazard.

**NOTE:** The present recommended long term exposure limit for ozone is 0.1 ppm (0.2 mg/m<sup>3</sup>) calculated as an 8 hr. time-weighted average concentration.

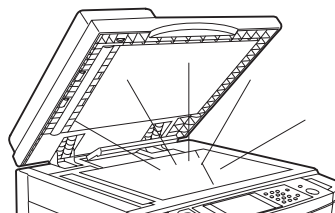
However, since the small amount that is emitted may have an objectionable odor, it is advisable to place the copier in a ventilated area.

#### Cautions

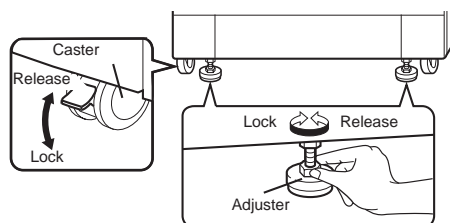
- 1) Do not touch the photoconductive drum. Scratches or smudges on the drum will cause dirty copies.
- 2) The fusing unit is extremely hot. Exercise care in this area.
- 3) Since a hard disk drive is built into the copier, be sure to turn the power switch to the "OFF" position when moving the copier. Take care not to subject the copier to any vibration or shock.



- 4) Do not look directly at the light source. Doing so may damage your eyes.



- 5) Installation adjusters are provided on the optional stand/500-sheet paper drawer. When moving the machine with the optional stand/500-sheet paper drawer, be sure to raise the installation adjusters. After moving the machine, lower the installation adjusters until they reach the floor to lock the machine in place. (If the casters are not locked securely, the machine will gradually move and the cables of the RADF and the SPF are rubbed against the wall, causing internal disconnection.)



- 6) When copying is interrupted (for example, because the INTERRUPT function has been used, paper or toner has run out, a misfeed has occurred, etc.), this copier will store the image data of the originals read prior to the interruption. If copying of secret documents is interrupted due to the above reasons, be sure to either resume the interrupted copying by pressing the START key, or clear the image data by pressing the clear all key after the interrupt copying is completed or the trouble is cleared, because the stored data may be printed by other operators.



## [2] SPECIFICATIONS

### 1. Machine type

Product Name	CPM	Type		Document Feeder	Paper Exit	Memory	
						RAM	HD
AR-250	25	Simplex	Desk top	—	1 tray	48 MB	—
AR-280	28	Simplex	Desk top	SPF	2 tray	16 MB	1 GB
AR-281	28	Simplex	Desk top	SPF	1 tray	16 MB	2 GB
AR-285	28	Duplex	Desk top	RADF	2 tray	16 MB	1 GB
AR-286	28	Duplex	Desk top	RADF	1 tray	16 MB	2 GB
AR-335	33	Duplex	Desk top	RADF	2 tray	16 MB	1 GB
AR-336	33	Duplex	Desk top	RADF	1 tray	16 MB	2 GB
AR-405	40	Duplex	Desk top	RADF	1 tray	16 MB	2 GB
AR-501	50	Duplex	Desk top	RSPF	1 tray	48 MB	2 GB
AR-505	50	Duplex	Desk top	RSPF	1 tray	48 MB	2 GB

\* Memory capacity is of the main body only, excluding optional expansion memory.

### 2. Copy speed

#### A. Basic Speed

per 1 scan	AR-250	AR-280 AR-281	AR-285 AR-286	AR-335 AR-336	AR-405	AR-501 AR-505
Single	25 cpm	28 cpm	28 cpm	28 cpm	34 cpm	47 cpm
Multiple	25 cpm	28 cpm	28 cpm	33 cpm	40 cpm	50 cpm

\* Speeds from all the paper feed ports including the normal copy and the manual feed copy.

#### B. Normal copy (100%)

	AR-250	AR-280 AR-281	AR-285 AR-286	AR-335 AR-336	AR-405	AR-501 AR-505
A4/8.5 × 11	25	28	28	33	40	50
A3/11 × 17	13	14	14	17	19	25
B4/8.5 × 14/ 8.5 × 13	15	17	17	21	24	29
B5/A5/ 8.5 × 5.5	25	28	28	33	40	50
A4R/B5R/ 8.5 × 11	18	20	20	24	27	35

#### C. Enlargement copy

	AR-250	AR-280 AR-281 (800%)	AR-285 AR-286 (800%)	AR-335 AR-336 (800%)	AR-405 (400%)	AR-501 AR-505 (400%)
A4/8.5 × 11	25	28	28	33	40	50
A3/11 × 17	13	14	14	17	19	25
B4/8.5 × 14/ 8.5 × 13	15	17	17	21	24	29
B5/A5/ 8.5 × 5.5	25	28	28	33	40	50
A4R/B5R/ 8.5 × 11	18	20	20	24	27	35

#### D. Reduction copy (25%)

	AR-250	AR-280 AR-281	AR-285 AR-286	AR-335 AR-336	AR-405	AR-501 AR-505
A4/8.5 × 11	25	28	28	33	40	50
A3/11 × 17	13	14	14	17	17	25
B4/8.5 × 14/ 8.5 × 13	15	17	17	21	24	29
B5/A5/ 8.5 × 5.5	25	28	28	33	40	50
A4R/B5R/ 8.5 × 11	18	20	20	24	27	35

### E. First Copy time

#### (1) Basic Speed

Model	AR-250	AR-280 AR-281	AR-285 AR-286	AR-335 AR-336	AR-405	AR-501 AR-505
Speed (sec.)	5.2	5.2	5.2	5.2	4.5	4.3

When the paper is fed from the Upper tray on the base unit.

Machines are measured when paper is fed from the upper tray of 2-tray exit unit.

#### (2) Detail

	AR-250	AR-280 AR-281	AR-285 AR-286	AR-335 AR-336	AR-405	AR-501 AR-505
Upper cassette (sec.)	5.2	5.2	5.2	5.2	4.5	4.3
Lower cassette (sec.)	5.7	5.7	5.7	5.7	5.0	4.5
Multi-Bypass Tray (sec.)	5.3	5.3	5.3	5.3	4.6	4.3
Stand/Upper paper drawer (sec.)	6.6	6.6	6.6	6.6	5.9	5.2
Stand/Medium paper drawer (sec.)	6.9	6.9	6.9	6.9	6.2	5.5
LCC (sec.)	5.9	5.9	5.9	5.9	5.2	4.7

Refer to each specification for the first copy time when paper is fed from the document feeder or the optional paper feed tray.

#### (3) First copy time from the document feeder

Model	AR-250 AR-281 AR-286	AR-280	AR-285 AR-335 AR-336	AR-405	AR-501 AR-505
When the SPF is used (sec.)	7.8	7.8	—	—	—
When the RADF is used (sec.)	8.8	—	8.8	7.6	—
When the RSPF is used (sec.)	—	—	—	—	7.0

When the paper is fed from the Upper tray on the base unit.

### 3. OC/DF

#### A. Document table

Max. document size		A3/11 × 17
Document reference position		Center left
Document detection		Yes
Detection size	Inch Series	11 × 17, 8.5 × 14, 8.5 × 11, 8.5 × 11R, 8.5 × 5.5
	AB Series	A3, B4, A4, A4R, A5
	Australia	A3, 216 × 330, A4, A4R, A5 (Note 1)
	B5 areas	A3, B4, A4, A4R, B5, B5R
OR guide display	Inch Series	11, 8.5, 5.5
	AB Series	A3/A4, B4/B5, A4R/A5, B5R, 11, 8.5 (Note 2)

(Note 1) For areas other than Australia, "B4/8.5 × 11" can be changed to "8.5 × 13" by the simulation.

(Note 2) The display of 8.5" for AB series is of the line display only. There is no size display.

#### B. SPF (AR-280/281)

##### (1) Document set

Set direction	Face down		
Set position	Center reference		
Set quantity	A4/8.5 × 11	30 sheets	30 sheets of 80g/m <sup>2</sup> must be set.
	Greater than the above.	15 sheets	For 80 ~ 128g/m <sup>2</sup> , paper of max. 4.7mm thick can be set.

**(2) Document transport**

Document transport system	Sheet through type
Document feed sequence	Top take-up feed

**(3) Document Size**

Document Size	AB Series	A3 ~ A5
	Inch Series	11 × 17 ~ 8.5 × 5.5
Paper Weight	50 ~ 128g/m <sup>2</sup> (14 ~ 34 lbs.)	

**(4) Multi quantity**

Multi quantity	In the high fidelity mode, multi copy is inhibited.
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**(5) Document mix feed**

Mix paper feed	Allowed.
Random paper feed	Not allowed.

No linkage with AMS is made.

**(6) Document detection**

Detection size	Inch Series	11 × 17, 8.5 × 14, 8.5 × 11, 8.5 × 11R, 8.5 × 5.5
	AB Series	A3, B4, A4, A4R, A5
	Australia	A3, A4, A4R, A5, 216 × 330 (Note 1)
Document guide display	Inch Series	11, 8.5, 5.5
	AB Series	A3/A4, B4/B5, A4R/A5, B5R, 8.5 (Note 2)

(Note 1) For areas other than Australia, "B4/8.5 × 11" can be changed to "8.5 × 13" by the simulation.

(Note 2) The display of 8.5" for AB series is of the line display only. There is no size display.

**(7) Stream mode**

Stream mode	The stream mode can be selected by the key operation program. (Only group mode)
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**(8) Document reverse**

Document reverse	No
------------------	----

**(9) Display section**

Display section	No
-----------------	----

**C. RADF (AR-285/286/335/336/405)****(1) Document set**

Set direction	Face up		
Set position	Center reference		
Set quantity	A4/8.5 × 11	50 sheets	35 ~ 80g/m <sup>2</sup> : Thickness Less than 6.5 mm
	Greater than the above	30 sheets	80 ~ 128g/m <sup>2</sup> : Thickness Less than 5 mm (50 sheets of 80g/m <sup>2</sup> )

**(2) Document transport system**

Document transport system	Belt system
Document fed sequence	Lower take-up paper feed (Face up paper feed)

**(3) Document size**

Document size	AB Series	A3 ~ A5
	Inch Series	11 × 17 ~ 8.5 × 5.5
Weight	35 ~ 128g/m <sup>2</sup> (10 ~ 34 lbs.)	

**(4) Document stop system**

Document stop system	Stopper system (Position control for single copy ) (Duplex copy)
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**(5) Document detection on the tray**

Document detection on the tray		Yes
Detection size	Inch Series	11 × 17, 8.5 × 14, 8.5 × 11, 8.5 × 11R, 8.5 × 5.5, 8.5 × 13
	AB Series	A3, B4, A4, A4R, A5, 8.5 × 13
	B5 area	A3, B4, A4, A4R, B5, B5R, A5
	Australia	A3, B4, A4, A4R, A5, 216 × 330
Document guide display	Inch Series	11, 8.5, 5.5
	AB Series	A3/A4, B4/B5, A4R/A5, B5R, 8.5 (Note)

(Note) AB series 8.5" display is of line display only. Size display is not made.

When setting Sim, "8.5 × 14" and "8.5 × 13" are separately detected.

**(7) Document mix feed**

Document mix feed	Mix paper feed	Possible (Same width size)
	Random paper feed	Possible

No linkage with AMS is made.

**(8) Document reversion**

Document reversion	Yes
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**(9) Display**

Display section	LED display	Document feed display section
		Document remaining display

**(10) Stream mode**

Stream mode	The stream mode can be selected by the key operation program. (Only group mode)
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**D. RSPF (AR-501/505)****(1) Document set**

Set direction	Face up	
Set position	Center reference	
Set quantity	Less than 80g/m <sup>2</sup>	50 sheets
	Greater than the above	Thickness Less than 6 mm

**(2) Document transport**

Document transport system	Sheet through type
Document feed sequence	Top take-up feed

**(3) Document size**

Document Size	AB Series	A3 ~ A5
	Inch Series	11 × 17 ~ 8.5 × 5.5
Paper Weight	Simplex	50 ~ 128g/m <sup>2</sup> (14 ~ 34 lbs.)
	Duplex	50 ~ 110g/m <sup>2</sup> (14 ~ 29 lbs.)

**(4) Document detection**

Detection size	Inch Series	11 × 17, 8.5 × 14, 8.5 × 11, 8.5 × 11R, 8.5 × 5.5
	AB Series	A3, B4, A4, A4R, A5, B5, B5R

**(5) Others**

Dimensions (W x D x H)	576 x 505 x 142 mm
Weight	About 13.5 kg
Super supply	DC 24V, DC 5V (Supplied from main body)
Zooming ratio	100 to 400%
Document exchange speed	Max. 50 sheets/minute
Power consumption	DC24V: 48W, DC5V: 2W

## 4. Paper feed

### A. Outline of paper feed

Copy size (Max. ~ Min.)	AB Series	A3 ~ A6R, Postcard
	Inch Series	11 × 17 ~ 8.5 × 5.5
Paper feed system		2 Tray + Manual Feed Tray
Paper feed capacity		500 × 2 + 50 (80g/m <sup>2</sup> )
Remaining detection	Paper feed tray section	Level detection available 0~ 25%, 25%~ 50%, 50%~ 85%, 85%~
	Manual Feed Tray	Empty detection only available

### B. Details of paper feed section

#### (1) Paper feed tray

Paper feed size	AB Series	A3/B4/A4/A4R/B5/B5R/A5
	Inch Series	11 × 17/8.5 × 14/8.5 × 13/8.5 × 11/8.5 × 11R/5.5 × 8.5
Paper weight		56 ~ 105g/m <sup>2</sup> (15 ~ 28 lbs.)
Paper size selection		User operation (slide switch system)
Slide switch	AB Series	A5/A4/A4R/B4/A3/B5/8.5 × 11/EXTRA
	Inch Series	11 × 17/8.5 × 14/8.5 × 13/8.5 × 11/8.5 × 11R/5.5 × 8.5/A4/EXTRA
Cassette attachment/detachment		Only the lower cassette possible

When the slide switch is set to "Special", the operation is made on the set size of the key operator program.

(Sizes of 13" in AB series and B5 are set with the key operator program.)

#### (2) Manual Feed Tray

Manual feed tray type		Folding, complete attachment
Paper size	AB Series	A3 ~ A6R
	Inch Series	11 × 17 ~ 8.5 × 5.5
	Paper Weight	52 ~ 128g/m <sup>2</sup> (14 ~ 34 lbs.), 176g/m <sup>2</sup> (index paper), 200g/m <sup>2</sup> (cover paper) (For greater than 105g/m <sup>2</sup> , 28lbs, the size is A4 or smaller. For greater than 128g/m <sup>2</sup> (34 lbs) portrait feed only.
Paper kind	Multi feed	Standard paper, special paper
	Single feed	Standard paper, special paper, No. 2 original paper
	Special paper	OHP, label paper, reproduction paper, index paper, cover paper For multi and back surface copy, only the single paper feed is allowed.
Detection size	AB Series	A3/B4/A4/A4R/B5/B5R/A5/A6R
	Inch Series	11 × 17/8.5 × 14/8.5 × 11/8.5 × 11R/5.5 × 8.5/7.25 × 10.5
Manual feed tray guide display	AB Series	A3/A4, B4/B5, A4R/A5, A5R, B5R, 11, 8.5 (NOTE 1)
	Inch Series	11, 8.5, 5.5

(Note 1) For 11" × 8.5" of AB series, only the line is displayed and the size is not displayed.

#### (3) Dehumidifying heater

Yes/No	No
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## 5. Multi copy

Multi max. quantity	999
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## 6. Warm up

	AR-250/280/281/285/286/335/336	AR-405	AR-501/505
Warm up time	Less than 65 sec	Less than 75 sec	About 150 sec
Pre-heat yes/no	Yes		
Jam recovery time	About 10sec (Leaving the machine for 60 sec after opening the door, standard condition, polygon stop.)		About 30 sec

## 7. Copy magnification ratio

		AR-250/280/281/ 285/286/335/336	AR-405/501/505
Fixed magnification ratio	AB Series	25, 50, 70, 81, 86, 100, 115, 122, 141, 200, 400, 800%	25, 50, 70, 81, 86, 100, 115, 122, 141, 200, 400%
		5R + 6E	
	Inch Series	25, 50, 64, 77, 95, 100, 121, 129, 141, 200, 400, 800%	25, 50, 64, 77, 95, 100, 121, 129, 141, 200, 400%
		5R + 6E	
Zoom width		25 ~ 800%	25 ~ 400%
Independent magnification width		25 ~ 800% for horizontal/vertical (25 ~ 800% (high fidelity copy))	25 ~ 400% for horizontal/vertical

## 8. Exposure

Exposure mode		Auto, character, character/photo, photo
Manual steps		9 steps
Resolution	Read	400 dpi
	Write	600 dpi
Gradation	Read	256 gradations
	Write	2 gradations (Default)
Toner save mode		Set with the key operator program. (In U.K., it is treated by a serviceman.)

## 9. Print area

### A. Max. print area

Max. area	AB Series	416 × 293 mm
	Inch Series	428 × 275 mm

### B. Loss width

Void area	AR-501	Lead edge 4 mm or less, rear edge 4 mm or less, FR total 5 mm or less
	AR-505	Other models
Image Loss	Other models	Lead edge 3 mm or less, rear edge 4 mm or less, FR total 5 mm or less
	Less than 5 mm	

## 10. Paper exit

### A. Paper exit form

	AR-280/285/335	AR-250/281/286/336/405/501/505
Paper exit form	2-tray paper exit	1-tray paper exit

## B. Paper exit section

		AR-280/285/ 335	AR-250/281/ 286/336/ 405	AR-501/505
Paper exit tray capacity	Upper Tray	250 sheets		
	Lower Tray	100 sheets	—	
Paper exit surface (Face up/Face down)	Upper Tray	Face up		Face up & Face down
	Lower Tray	Face up	—	

## C. Paper size

		Size	Paper Weight
Upper Tray	AB Series	A3 ~ A6R	50 ~ 128g/m <sup>2</sup> , 176g/m <sup>2</sup> , 200g/m <sup>2</sup>
	Inch Series	11 × 17 ~ 8.5 × 5.5	
Lower Tray	AB Series	A3 ~ A5	50 ~ 105g/m <sup>2</sup>
	Inch Series	11 × 17 ~ 8.5 × 5.5	

Duplex pass section : 56 ~ 105g/m<sup>2</sup>

## 11. Duplex module (AR-285/AR-335/336/405/501/505)

### A. Auto duplex unit

	AR-250/280/281	AR-285/286/335/ 336/405/501/505
Auto Duplex Unit	Option (AR-DU1)	Standard

## B. Paper size

Paper size	AB Series	A3, B4, A4, A4R, B5, B5R, A5
	Inch Series	11 × 17, 8.5 × 14, 8.5 × 13, 8.5 × 11, 8.5 × 11R, 7.25 × 10.5R
Paper Weight		56 ~ 105g/m <sup>2</sup> (Same as the paper feed section of the main body)

## C. Capacity

Capacity	1 Sheet (Single Pass Method)
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## 12. Shipping form

### A. Packing form

Body	Body/accessories
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## B. Paper size

First Tray	AB Series	A3
	Inch Series	11 × 17
Second Tray	AB Series	A3
	Inch Series	11 × 17

## 13. Additional functions

### A. Main body functions

APS	
AMS	AMS by flow scan with DF is not allowed.
Auto tray switching	
1 scan multi copy	
Rotation copy	
Pre-heat	Conditions are set with the key operation.
Auto shut off	Conditions are set with the key operation.
Message display	
Key operator program	
Communication (RIC)	
Process control	
Coin vendor	Only the connector is provided on the PWB.

## B. Copy function

	AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505
Job call/ registration	9		
Dept. control	Max. 50 dept. (Only the copy function is controlled.)	Max. 500 dept.	
Binding margin	Shift width AB series: 10mm, Inch series: 1/2" with adjustment (Binding direction selectable)		
Edge erase	AB series: 10mm, Inch series: 1/2" with adjustment		
Center erase			
1-set, 2-copy			
Independent zooming	25 ~ 800% for vertical/horizontal	25 ~ 400% for vertical/horizontal	
White/black reversion	All surface only (only in the manual mode)		
Cover paper	Cover/back cover/cover and back cover		
OHP insert paper	Insert paper copy Yes/No selectable	Only 1 face-up paper exit is possible	
Centering			
Multi shot (Nin1)	Paper feed size is up to A4.		
Repeat copy			
Date print	Time setting by the key operation.		
Stamp function			
Middle binding	HD is required for AR-250.		
Page print	HD is required for AR-250.		

## 14. Options

		AR-250	AR-280	AR-285 AR-335	AR-336 AR-405	AR-501 AR-505
Document feeder	SPF	Option	Standard	—	—	—
	RADF	Option	—	Standard	Standard	—
	RSFP	—	—	—	—	Standard
Paper feed	1 tray desk (AR-DE1)	Option	Option	Option	Option	Option (AR-DE7)
	Large capacity tray (AR-LC1)	Option	Option	Option	Option	Option (AR-LC1N)
	Tray module (AR-CS1)	Option	Option	Option	Option	Option
	Desk (AR-DD1)	Option	Option	Option	Option	Option
Duplex module	Auto duplex module (AR-DU1)	Option	Option	Standard	Standard	Standard
Finishing	Dual tray output unit (AR-TR1)	Option	Standard	Standard	Option	—
	Finisher (AR-FN1)	Option	Option	Option	Option	—
	Finisher (AR-RN2)	Option	—	—	Option	—
	FN3	Option	—	—	—	Option

## 15. Other specifications

Photoconductor kind	OPC drum
Photoconductor dia.	65 φ
Process cleaning	Blade
Exposure lamp	No-electrode xenon lamp
Developing system	Dry, 2-component magnetic brush development
Charging system	DC negative scorotron (saw tooth electrode)
Transfer system	DC positive control
Separation system	AC corotron/DC bias separation pawl/ Separation lamp (AR-501/505 only)
Fusing system	Heat roller
Fusing cleaning	Yes (AR-501/505 only)

## 16. Outlook

	W x D x H (mm)	Machine occupying dimensions	Weight
AR-250	600 × 695 × 658	1292 × 630	About 81 kg
AR-280	600 × 695 × 698	1292 × 695	About 89 kg
AR-281	600 × 695 × 735	1292 × 695	About 87 kg
AR-285/335	600 × 695 × 750	1292 × 695	About 98 kg
AR-286/336	600 × 695 × 718	1292 × 695	About 101 kg
AR-405	600 × 700 × 750	1292 × 700	About 98 kg
AR-501/505	600 × 700 × 773	1292 × 700	About 102 kg

## 17. Power supply

Voltage	100 V, 110 V, 120 V, 127 V, 220-230 V, 240 V
Frequency	50/60 Hz Common

## 18. Power consumption

	AR-280/285/335	AR-250/281/286/336/405	AR-501/505
Max. power consumption	Less than 1440 W	Less than 1440 W	Less than 1590 W

## 19. Environmental measures

### A. EnergyStar

	AR-250	AR-280/285	AR-281/286	AR-335	AR-336	AR-405	AR-501/505
Low power mode (Pre-heat mode)	Less than 101.25 W	Less than 112.8 W	Less than 112.8 W	Less than 132.05 W	Less than 132.05 W	Less than 159 W	Less than 197.5 W
	Recovery time	Less than 30 sec					Less than 1 min
Sleep mode (Power save mode)	Power consumption	Less than 15 W	Less than 15 W	Less than 15 W	Less than 15 W	Less than 15 W	Less than 20 W
	Shift time	Max. 240 min (Default 60 min)					Max. 240 min (Default 90 min)

## 20. Combination of functions

### AR-280/285/335

	Independent zooming	AMS	Water mark	Stamp	Page print	Date print	Black-white reversion	Centering	Edge erase	Binding margin	1-set 2-copy (Document table only)	Middle binding	Repeat	Multi shot (DF only)	OHP insert paper	Cover insertion (DF only)	Hi-Fi copy	Duplex copy direction switch	Offset	Group	Sort	Staple sort
S → S	○	○	○	○	○	○	○	○	○	○	○	▲	○	○	○	○	○	×	○	○	○	○
S (Even number) → D	○	○	○	○	○	○	○	○	○	○	○	▲	○	○	×	○	×	○	○	○	○	○
S (Odd number) → D (DF only)	○	○	○	○	○	○	○	○	○	○	×	▲	○	○	×	○	×	○	○	○	○	○
S → D (Auto)	○	○	○	○	○	○	○	○	○	○	○	▲	○	○	×	○	×	○	○	○	○	○
D → D (DF only)	○	○	○	○	○	○	○	○	○	○	×	▲	○	○	×	○	×	×	○	○	○	○
D → S (DF only)	○	○	○	○	○	○	○	○	○	○	×	▲	○	○	○	○	○	×	○	○	○	○
Staple sort	○	○	○	○	○	○	○	○	○	○	○	×	○	○	×	○	×	○	○	×	×	
Sort	○	○	○	○	○	○	○	○	○	○	○	○	○	○	△	○	△	○	○	×		
Group	○	○	○	○	○	○	○	○	○	○	○	○	○	○	△	○	○	○	○			
Offset	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
Duplex copy direction switch	○	○	○	○	○	○	○	○	○	○	×	○	×	×	×	○	×					
Hi-Fi copy (*)	○	○	×	×	×	×	×	×	○	○	○	×	×	×	×	○						
Cover insertion (DF only)	○	○	○	○	○	○	×	○	○	○	×	×	×	×	×							
OHP insert paper	○	○	○	○	○	○	×	○	○	○	○	×	×	×	×							
Multi shot (DF only)	×	×	○	○	○	○	×	○	○	○	×	×	×									
Repeat	○	×	○	○	○	○	○	○	○	○	×	×										
Middle binding	×	○	○	○	○	○	×	○	○	○	×											
1-set 2-copy (Document table only)	○	○	○	○	○	○	×	○	○	○												
Binding margin	○	○	○	○	○	○	○	○	○													
Edge erase	○	○	○	○	○	○	○	○														
Centering	○	○	○	○	○	○	○															
Black-white reversion	○	○	×	○	○	○	○															
Date print	○	○	○	○	○																	
Page print	○	○	○	○																		
Stamp	○	○	×																			
Water mark	○	○																				
AMS	○																					

▲ Follows the setting on the middle binding display.

△ Only one set of copies available.

\* Combination with SPF mode is inhibited.

**AR-250/281/286/336/405**

[illegible]

▲ Follows the setting on the middle binding display.

Δ Only one set of copies available.

**AR-501/505**

[illegible]

▲ Follows the setting on the middle binding display.

Δ Only one set of copies available.

When making an interruption, the number of documents is limited.

Single copy: Max. 20 sheets (A3/B4 document: 10sheets)

Duplex copy: Max. 10 sheets (A3/B4 document: 5 sheets)

\* This function is valid in the AR-505 only.

### [3] CONSUMABLE PARTS

#### 1. Consumable Parts List

##### A. USA

##### AR-250/280/281/285/286/335/336

No.	ITEM	CONTENTS	LIFE	MODEL NAME		REMARKS
				AR-280/285/ 335	AR-250/281/ 286/336	
1	Drum	OPC Drum ×1	160K	AR-330DR	AR-336DR	
2	Developer (Black)	Developer (800g) ×10	80K (×10)	AR-330MD (AR-330ND)	AR-336MD (AR-336ND)	AR-330MD = (AR-330ND) × 10 AR-336MD = (AR-336ND) × 10
3	Toner (Black)	Toner Cartridge (700g) ×10	17.5K (×10)	AR-330MT (AR-330NT)	AR-400MT (AR-400NT)	AR-330MT = (AR-330NT) × 10 AR-400MT = (AR-400NT) × 10
4	Upper Heat Roller Kit	Upper Heat Roller ×1 Fusing Separation Pawl (upper) ×4 Heat Roller Gear ×1	160K	AR-330UH		Replacement of fusing separation pawl for every 80 K should be done using those supplied separately.
5	Lower Heat Roller Kit	Lower Heat Roller ×1 Fusing Separation Pawl (lower) ×2	160K	AR-330LH		Replacement of fusing separation pawl for every 80 K should be done using those supplied separately.
6	80K Maintenance Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Drum Separation Unit ×1	80K	AR-330KA1	AR-400KA	
7	Cleaner Blade	Cleaner Blade ×10	80K (×10)	AR-330CB		AR-330CB= (AR-330BL) ×10
8	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11		Cartridge for AR-FN1 Common with S55,S55 N
9	Staple Cartridge	Staple Cartridge (SF-SC12) ×3	5K staples ×3	SF-LS12		Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) ×3
9	Upper Heat Roller	Upper Heat Roller ×1	160K	AR-330HU		
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	80K (×10)	SF-216UP		SF216UP=SF-216TP (incl.4 pawls) ×10
11	Heat Roller Gear	Heat Roller Gear ×10	160K (×10)	SF-216HG		SF216HG= (SF216JG) ×10
12	Lower Heat Roller	Lower Heat Roller ×1	160K	AR-330HR		
13	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	80K (×10)	SF-240LP		SF240LP=SF-240MP (incl.2 pawls) ×10
14	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	80K (×10)	SF-240DP		SF240DP=SF-240EP (incl.2 pawls) ×10
15	Screen Grid	Screen Grid ×10	80K (×10)	AR-330SU		AR-330SU= (AR-330TU) ×10
16	Charging Plate	Charging Plate ×10	80K (×10)	AR-330PU		AR-330PU= (AR-330NU) ×10
17	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB		
18	Busing	Busing ×2 ×10	160K (×10)	SF-240BU		SF-240BU= (SF-240DU) ×10
19	Ozone Filter	Ozone Filter ×10	80K (×10)	AR-330FL		AR-330FL= (AR-330JL) ×10
20	Copy Lamp	Copy Lamp ×10		AR-330CL		AR-330CL= (AR-330DL) ×10
21	MC Unit	MC Unit ×10		AR-330MC		AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

##### AR-405

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum ×1	180K	AR-400DR	
2	Developer (Black)	Developer (800g) ×10	90K (×10)	AR-400MD	AR-400MD = (AR-400ND) × 10
3	Toner (Black)	Toner Cartridge (700g) ×10	22K (×1)	AR-400MT	AR-400MT = (AR-400NT) × 10
4	Upper Heat Roller Kit	Upper Heat Roller ×1 Fusing Separation Pawl (upper) ×4 Heat Roller Gear ×1	180K	AR-330UH	Replacement of fusing separation pawl for every 80 K should be done using those supplied separately.
5	Lower Heat Roller Kit	Lower Heat Roller ×1 Fusing Separation Pawl (lower) ×2	180K	AR-330LH	Replacement of fusing separation pawl for every 80 K should be done using those supplied separately.
6	90K Maintenance Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Drum Separation Unit ×1	90K	AR-400KA1	
7	Cleaner Blade	Cleaner Blade ×10	90K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
8	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1 Common with S55,S55 N
9	Staple Cartridge	Staple Cartridge (SF-SC12) ×3	5K staples ×3	SF-LS12	Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) ×3
9	Upper Heat Roller	Upper Heat Roller ×1	180K	AR-330HU	
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	90K (×10)	SF-216UP	SF216UP=SF-216TP (incl.4 pawls) ×10
11	Heat Roller Gear	Heat Roller Gear ×10	180K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
12	Lower Heat Roller	Lower Heat Roller ×1	180K	AR-330HR	
13	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	90K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
14	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	90K (×10)	SF-240DP	SF240DP=SF-240EP (incl.2 pawls) ×10
15	Screen Grid	Screen Grid ×10	90K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
16	Charging Plate	Charging Plate ×10	90K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
17	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB	
18	Busing	Busing ×2 ×10	180K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
19	Ozone Filter	Ozone Filter ×10	90K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
20	Copy Lamp	Copy Lamp ×10		AR-330CL	AR-330CL= (AR-330DL) ×10
21	MC Unit	MC Unit ×10		AR-330MC	AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## AR-501/505

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum ×1	250K	AR-500DR	
2	Developer (Black)	Developer (800g) ×10	250K (×10)	AR-500MD (AR500ND)	(AR-500ND) ×10 = AR-500MD
3	Toner (Black)	Toner Cartridge (700g) ×10	25K (×10)	AR-500MT (AR-500NT)	(AR-500NT) ×10 = AR-500MT
4	Upper Heat Roller Kit	Upper Heat Roller ×1 Fusing Separation Pawl (upper) ×4 Heat Roller Gear ×1	250K	AR-505UH	
5	Lower Heat Roller Kit	Lower Heat Roller ×1 Fusing Separation Pawl (lower) ×2	250K	AR-505LH	
6	125K Maintenance Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Drum Separation Unit ×1 Upper CL Roller Unit ×1	125K	AR-505KA1	
7	Cleaner Blade	Cleaner Blade ×10	125K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
8	Curl Adjustment Roller	Curl Adjustment Roller ×10	250K (×10)	AR-505KR	AR-505KR= (AR-505JR) ×10
9	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1/FN1N/FN3 Common with S55, S55 N
10	Upper Heat Roller	Upper Heat Roller ×1	250K	AR-505HU	
11	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	125K (×10)	AR-505UP	AR-505UP=AR-505TP (incl.4 pawls) ×10
12	Heat Roller Gear	Heat Roller Gear ×10	250K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
13	Lower Heat Roller	Lower Heat Roller ×1	250K	AR-505HR	
14	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	125K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
15	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	125K (×10)	AR-505DP	AR-505DP=AR-505EP (incl.2 pawls) ×10
16	Screen Grid	Screen Grid ×10	125K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
17	Charging Plate	Charging Plate ×10	125K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
18	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB	
19	Busing	Busing ×2 ×10	250K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
20	Ozone Filter	Ozone Filter ×10	125K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
21	Ozone Filter 50	Ozone Filter 50 ×10	125K (×10)	AR-505FL	AR-505FL= (AR-505JL) ×10
22	MC Unit	MC Unit ×10		AR-330MC	AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## B. Canada

## AR-250/280/281/285/286/335/336

No.	ITEM	CONTENTS	LIFE	MODEL NAME		REMARKS
				AR-280/285/335	AR-250/281/286/336	
1	Drum	OPC Drum ×1	160K	AR-330DR	AR-336DR	
2	Developer (Black)	Developer (800g) ×10	80K (×10)	AR-330MD (AR330ND)	AR-336MD (AR-336ND)	AR-330MD = (AR-330ND) × 10 AR-336MD = (AR-336ND) × 10
3	Toner (Black)	Toner Cartridge (700g) ×10	17.5K (×10)	AR-330MT (AR-330NT)	AR-400MT (AR-400NT)	AR-330MT = (AR-330NT) × 10 AR-400MT = (AR-400NT) × 10
4	80K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1	80K	AR-330KA	AR-400KA	
5	160K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1	160K	AR-330KB		
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11		Cartridge for AR-FN1 Common with S55, S55 N
7	Staple Cartridge	Staple Cartridge (SF-SC12) ×3	5K staples ×3	SF-LS12		Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) ×3
8	Cleaner Blade	Cleaner Blade ×10	80K (×10)	AR-330CB		AR-330CB= (AR-330BL) ×10
9	Upper Heat Roller	Upper Heat Roller ×1	160K	AR-330HU		
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	80K (×10)	SF-216UP		SF216UP=SF-216TP (incl.4 pawls) ×10
11	Heat Roller Gear	Heat Roller Gear ×10	160K (×10)	SF-216HG		SF216HG= (SF216JG) ×10
12	Lower Heat Roller	Lower Heat Roller ×1	160K	AR-330HR		
13	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	80K (×10)	SF-240LP		SF240LP=SF-240MP (incl.2 pawls) ×10
14	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	80K (×10)	SF-240DP		SF240DP=SF-240EP (incl.2 pawls) ×10
15	Screen Grid	Screen Grid ×10	80K (×10)	AR-330SU		AR-330SU= (AR-330TU) ×10
16	Charging Plate	Charging Plate ×10	80K (×10)	AR-330PU		AR-330PU= (AR-330NU) ×10
17	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB		
18	Busing	Busing ×2 ×10	160K (×10)	SF-240BU		SF-240BU= (SF-240DU) ×10
19	Ozone Filter	Ozone Filter ×10	80K (×10)	AR-330FL		AR-330FL= (AR-330JL) ×10
20	Copy Lamp	Copy Lamp ×10		AR-330CL		AR-330CL= (AR-330DL) ×10
21	MC Unit	MC Unit ×10		AR-330MC		AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.



## AR-405

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum ×1	180K	AR-400DR	
2	Developer (Black)	Developer (800g) ×10	80K (×10)	AR-400MD	AR-400MD = (AR-400ND) × 10
3	Toner (Black)	Toner Cartridge (700g) ×10	22K (×1)	AR-400MT	AR-400MT = (AR-400NT) × 10
4	90K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1	90K	AR-400KA	
5	180K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1	180K	AR-330KB	
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1 Common with S55,S55 N
7	Staple Cartridge	Staple Cartridge (SF-SC12) ×3	5K staples ×3	SF-LS12	Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) ×3
8	Cleaner Blade	Cleaner Blade ×10	90K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
9	Upper Heat Roller	Upper Heat Roller ×1	180K	AR-330HU	
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4	90K (×10)	SF-216UP	SF216UP=SF-216TP (incl.4 pawls) ×10
11	Heat Roller Gear	Heat Roller Gear ×10	180K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
12	Lower Heat Roller	Lower Heat Roller ×1	180K	AR-330HR	
13	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2	90K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
14	Drum Separation Pawl	Drum Separation Pawl ×2	90K (×10)	SF-240DP	SF240DP=SF-240EP (incl.2 pawls) ×10
15	Screen Grid	Screen Grid ×10	90K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
16	Charging Plate	Charging Plate ×10	90K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
17	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB	
18	Busing	Busing ×2	180K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
19	Ozone Filter	Ozone Filter ×10	90K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
20	Copy Lamp	Copy Lamp ×10		AR-330CL	AR-330CL= (AR-330DL) ×10
21	MC Unit	MC Unit ×10		AR-330MC	AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## AR-505

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum ×1	250K	AR-500DR	
2	Developer (Black)	Developer (800g) ×10	250K (×10)	AR-500MD (AR500ND)	(AR-500ND) ×10 = AR-500MD
3	Toner (Black)	Toner Cartridge (700g) ×10	25K (×10)	AR-500MT (AR-500NT)	(AR-500NT) ×10 = AR-500MT
4	125K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1 Cleaning Roller ×1 Upper CL Roller Unit ×1	125K	AR-505KA	
5	250K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1 Curl Adjustment Roller ×1	250K	AR-505KB	
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1/FN1N/FN3 Common with S55,S55 N
7	Cleaner Blade	Cleaner Blade ×10	125K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
8	Upper Heat Roller	Upper Heat Roller ×1	250K	AR-505HU	
9	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4	125K (×10)	AR-505UP	AR-505UP=AR-505TP (incl.4 pawls) ×10
10	Heat Roller Gear	Heat Roller Gear ×10	250K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
11	Lower Heat Roller	Lower Heat Roller ×1	250K	AR-505HR	
12	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2	125K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
13	Drum Separation Pawl	Drum Separation Pawl ×2	125K (×10)	AR-505DP	AR-505DP=AR-505EP (incl.2 pawls) ×10
14	Screen Grid	Screen Grid ×10	125K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
15	Charging Plate	Charging Plate ×10	125K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
16	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB	
17	Busing	Busing ×2	250K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
18	Ozone Filter	Ozone Filter ×10	125K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
19	Ozone Filter 50	Ozone Filter 50 ×10	125K (×10)	AR-505FL	AR-505FL= (AR-505JL) ×10
20	MC Unit	MC Unit ×10		AR-330MC	AR-330MC= (AR-330NC) ×10
21	Curl Adjustment Roller	Curl Adjustment Roller ×10	250K (×10)	AR-505KR	AR-505KR= (AR-505JR) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## C. Europe / U.K. / Australia / New Zealand

## AR-250/280/281/285/286/335/336

No.	ITEM	CONTENTS	LIFE	MODEL NAME		REMARKS
				AR-280/285/ 335	AR-250/281/ 286/336	
1	Drum	OPC Drum x1	160K	AR-330DM	AR-331DM	
2	Developer (Black)	Developer (800g) x10	80K (x10)	AR-330LD (AR-330DV)	AR-336LD (AR-336DV)	AR-330LD = (AR-330DV) x 10 AR-336LD = (AR-336DV) x 10
3	Toner (Black)	Toner Cartridge (700g) x10	17.5K (x10)	AR-330LT (AR-330T)	AR-400LT (AR-400T)	AR-330LT = (AR-330T) x 10 AR-400LT = (AR-400T) x 10
4	80K PM Kit	Cleaner Blade x1 Charging Plate Unit x1 Waste Toner Bottle x3 Fusing Separation Pawl (upper) x4 Fusing Separation Pawl (lower) x2 Screen Grid x1 Drum Separation Unit x1	80K	AR-330KA	AR-400KA	
5	160K PM Kit	Upper Heat Roller x1 Lower Heat Roller x1 Toner Receiving Seal x1 DV Seal x1 Heat Roller Gear x1	160K	AR-330KB		
6	Staple Cartridge	Staple Cartridge (SF-SC11) x3	5K staples x3	SF-SC11		Cartridge for AR-FN1 Common with S55,S55 N
7	Staple Cartridge	Staple Cartridge (SF-SC12) x3	5K staples x3	SF-LS12		Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) x3
8	Cleaner Blade	Cleaner Blade x10	80K (x10)	AR-330CB		AR-330CB= (AR-330BL) x10
9	Upper Heat Roller	Upper Heat Roller x1	160K	AR-330HU		
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) x4 x10	80K (x10)	SF-216UP		SF216UP=SF-216TP (incl.4 pawls) x10
11	Heat Roller Gear	Heat Roller Gear x10	160K (x10)	SF-216HG		SF216HG= (SF216JG) x10
12	Lower Heat Roller	Lower Heat Roller x1	160K	AR-330HR		
13	Fusing Separation Pawl (upper)	Fusing Separation Pawl (lower) x2 x10	80K (x10)	SF-240LP		SF240LP=SF-240MP (incl.2 pawls) x10
14	Drum Separation Pawl	Drum Separation Pawl x2 x10	80K (x10)	SF-240DP		SF240DP=SF-240EP (incl.2 pawls) x10
15	Screen Grid	Screen Grid x10	80K (x10)	AR-330SU		AR-330SU= (AR-330TU) x10
16	Charging Plate	Charging Plate x10	80K (x10)	AR-330PU		AR-330PU= (AR-330NU) x10
17	Waste Toner Bottle	Waste Toner Bottle x1		AR-330TB		
18	Busing	Busing x2 x10	160K (x10)	SF-240BU		SF-240BU= (SF-240DU) x10
19	Ozone Filter	Ozone Filter x10	80K (x10)	AR-330FL		AR-330FL= (AR-330JL) x10
20	Copy Lamp	Copy Lamp x10		AR-330CL		AR-330CL= (AR-330DL) x10
21	MC Unit	MC Unit x10		AR-330MC		AR-330MC= (AR-330NC) x10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## AR-405

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum x1	180K	AR-400DM	
2	Developer (Black)	Developer (800g) x10	90K (x10)	AR-400LD	AR-400LD = (AR-400DV) × 10
3	Toner (Black)	Toner Cartridge (700g) x10	22K (x1)	AR-400LT	AR-400LT = (AR-400T) × 10
4	90K PM Kit	Cleaner Blade x1 Charging Plate Unit x1 Waste Toner Bottle x3 Fusing Separation Pawl (upper) x4 Fusing Separation Pawl (lower) x2 Screen Grid x1 Drum Separation Unit x1	90K	AR-400KA	
5	180K PM Kit	Upper Heat Roller x1 Lower Heat Roller x1 Toner Receiving Seal x1 DV Seal x1 Heat Roller Gear x1	180K	AR-400KB	
6	Staple Cartridge	Staple Cartridge (SF-SC11) x3	5K staples x3	SF-SC11	Cartridge for AR-FN1 Common with S55,S55 N
7	Staple Cartridge	Staple Cartridge (SF-SC12) x3	5K staples x3	SF-LS12	Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) x3
8	Cleaner Blade	Cleaner Blade x10	90K (x10)	AR-330CB	AR-330CB= (AR-330BL) x10
9	Upper Heat Roller	Upper Heat Roller x1	180K	AR-400HU	
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) x4 x10	90K (x10)	SF-216UP	SF216UP=SF-216TP (incl.4 pawls) x10
11	Heat Roller Gear	Heat Roller Gear x10	180K (x10)	SF-216HG	SF216HG= (SF216JG) x10
12	Lower Heat Roller	Lower Heat Roller x1	180K	AR-330HR	
13	Fusing Separation Pawl (upper)	Fusing Separation Pawl (lower) x2 x10	90K (x10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) x10
14	Drum Separation Pawl	Drum Separation Pawl x2 x10	90K (x10)	SF-240DP	SF240DP=SF-240EP (incl.2 pawls) x10
15	Screen Grid	Screen Grid x10	90K (x10)	AR-330SU	AR-330SU= (AR-330TU) x10
16	Charging Plate	Charging Plate x10	90K (x10)	AR-330PU	AR-330PU= (AR-330NU) x10
17	Waste Toner Bottle	Waste Toner Bottle x1		AR-330TB	
18	Busing	Busing x2 x10	180K (x10)	SF-240BU	SF-240BU= (SF-240DU) x10
19	Ozone Filter	Ozone Filter x10	90K (x10)	AR-330FL	AR-330FL= (AR-330JL) x10
20	Copy Lamp	Copy Lamp x10		AR-330CL	AR-330CL= (AR-330DL) x10
21	MC Unit	MC Unit x10		AR-330MC	AR-330MC= (AR-330NC) x10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## AR-505

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum ×1	250K	AR-500DM	
2	Developer (Black)	Developer (800g) ×10	250K (×10)	AR-500LD (AR-500DV)	(AR-500DV) ×10 = AR-500LD
3	Toner (Black)	Toner Cartridge (700g) ×10	25K (×10)	AR-500LT (AR-500T)	(AR-500T) ×10 = AR-500LT
4	125K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1 Cleaning Roller ×1	125K	AR-505KA	
5	250K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1 Curl Adjustment Roller ×1 Upper CL Roller Unit ×1	250K	AR-505KB	
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1/FN1N/FN3 Common with S55,S55 N
7	Cleaner Blade	Cleaner Blade ×10	125K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
8	Upper Heat Roller	Upper Heat Roller ×1	250K	AR-505HU	
9	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	125K (×10)	AR-505UP	AR-505UP=AR-505TP (incl.4 pawls) ×10
10	Heat Roller Gear	Heat Roller Gear ×10	250K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
11	Lower Heat Roller	Lower Heat Roller ×1	250K	AR-505HR	
12	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	125K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
13	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	125K (×10)	AR-505DP	AR-505DP=AR-505EP (incl.2 pawls) ×10
14	Screen Grid	Screen Grid ×10	125K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
15	Charging Plate	Charging Plate ×10	125K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
16	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB	
17	Busing	Busing ×2 ×10	250K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
18	Ozone Filter	Ozone Filter ×10	125K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
19	Ozone Filter 50	Ozone Filter 50 ×10	125K (×10)	AR-505FL	AR-505FL= (AR-505JL) ×10
20	MC Unit	MC Unit ×10		AR-330MC	AR-330MC= (AR-330NC) ×10
21	Curl Adjustment Roller	Curl Adjustment Roller ×10	250K (×10)	AR-505KR	AR-505KR= (AR-505JR) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## D. Asia / Middle &amp; South America

## AR-250/280/281/285/286/335/336

No.	ITEM	CONTENTS	LIFE	MODEL NAME		REMARKS
				AR-280/285/335	AR-250/281/286/336	
1	Drum	OPC Drum ×1	160K	AR-330DR	AR-336DR	
2	Developer (Black)	Developer (800g) ×10	80K (×10)	AR-330CD (AR-330SD)	AR-336CD (AR-336SD)	AR-330CD = (AR-330SD) × 10 AR-336CD = (AR-336SD) × 10
3	Toner (Black)	Toner Cartridge (700g) ×10	17.5K (×10)	AR-330CT (AR-330ST)	AR-400CT (AR-400ST)	AR-330CT = (AR-330ST) × 10 AR-400CT = (AR-400ST) × 10
4	80K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1	80K	AR-330KA		
5	160K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1	160K	AR-330KB		
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11		Cartridge for AR-FN1 Common with S55,S55 N
7	Staple Cartridge	Staple Cartridge (SF-SC12) ×3	5K staples ×3	SF-LS12		Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) ×3
8	Cleaner Blade	Cleaner Blade ×10	80K (×10)	AR-330CB		AR-330CB= (AR-330BL) ×10
9	Upper Heat Roller	Upper Heat Roller ×1	160K	AR-330HU		
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	80K (×10)	SF-216UP		SF216UP=SF-216TP (incl.4 pawls) ×10
11	Heat Roller Gear	Heat Roller Gear ×10	160K (×10)	SF-216HG		SF216HG= (SF216JG) ×10
12	Lower Heat Roller	Lower Heat Roller ×1	160K	AR-330HR		
13	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	80K (×10)	SF-240LP		SF240LP=SF-240MP (incl.2 pawls) ×10
14	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	80K (×10)	SF-240DP		SF240DP=SF-240EP (incl.2 pawls) ×10
15	Screen Grid	Screen Grid ×10	80K (×10)	AR-330SU		AR-330SU= (AR-330TU) ×10
16	Charging Plate	Charging Plate ×10	80K (×10)	AR-330PU		AR-330PU= (AR-330NU) ×10
17	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB		
18	Busing	Busing ×2 ×10	160K (×10)	SF-240BU		SF-240BU= (SF-240DU) ×10
19	Ozone Filter	Ozone Filter ×10	80K (×10)	AR-330FL		AR-330FL= (AR-330JL) ×10
20	Copy Lamp	Copy Lamp ×10		AR-330CL		AR-330CL= (AR-330DL) ×10
21	MC Unit	MC Unit ×10		AR-330MC		AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## AR-405

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum ×1	180K	AR-400DM	
2	Developer (Black)	Developer (800g) ×10	90K (×10)	AR-400CD	AR-400CD = (AR-400SD) × 10
3	Toner (Black)	Toner Cartridge (700g) ×10	22K (×1)	AR-400CT	AR-400CT = (AR-400ST) × 10
4	90K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1	90K	AR-400KA	
5	180K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1	180K	AR-400KB	
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1 Common with S55,S55 N
7	Staple Cartridge	Staple Cartridge (SF-SC12) ×3	5K staples ×3	SF-LS12	Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) ×3
8	Cleaner Blade	Cleaner Blade ×10	90K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
9	Upper Heat Roller	Upper Heat Roller ×1	180K	AR-400HU	
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	90K (×10)	SF-216UP	SF216UP=SF-216TP (incl.4 pawls) ×10
11	Heat Roller Gear	Heat Roller Gear ×10	180K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
12	Lower Heat Roller	Lower Heat Roller ×1	180K	AR-330HR	
13	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	90K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
14	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	90K (×10)	SF-240DP	SF240DP=SF-240EP (incl.2 pawls) ×10
15	Screen Grid	Screen Grid ×10	90K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
16	Charging Plate	Charging Plate ×10	90K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
17	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB	
18	Busing	Busing ×2 ×10	180K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
19	Ozone Filter	Ozone Filter ×10	90K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
20	Copy Lamp	Copy Lamp ×10		AR-330CL	AR-330CL= (AR-330DL) ×10
21	MC Unit	MC Unit ×10		AR-330MC	AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## AR-505

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum ×1	250K	AR-500DR	
2	Developer (Black)	Developer (800g) ×10	250K (×10)	AR-500CD (AR500SD)	(AR-500SD) ×10 = AR-500CD
3	Toner (Black)	Toner Cartridge (700g) ×10	25K (×10)	AR-500CT (AR-500ST)	(AR-500ST) ×10 = AR-500CT
4	125K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1 Cleaning Roller ×1 Upper CL Roller Unit ×1	125K	AR-505KA	
5	250K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1 Curl Adjustment Roller ×1	250K	AR-505KB	
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1/FN1N/FN3 Common with S55,S55 N
7	Cleaner Blade	Cleaner Blade ×10	125K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
8	Upper Heat Roller	Upper Heat Roller ×1	250K	AR-505HU	
9	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	125K (×10)	AR-505UP	AR-505UP=AR-505TP (incl.4 pawls) ×10
10	Heat Roller Gear	Heat Roller Gear ×10	250K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
11	Lower Heat Roller	Lower Heat Roller ×1	250K	AR-505HR	
12	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	125K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
13	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	125K (×10)	AR-505DP	AR-505DP=AR-505EP (incl.2 pawls) ×10
14	Screen Grid	Screen Grid ×10	125K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
15	Charging Plate	Charging Plate ×10	125K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
16	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB	
17	Busing	Busing ×2 ×10	250K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
18	Ozone Filter	Ozone Filter ×10	125K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
19	Ozone Filter 50	Ozone Filter 50 ×10	125K (×10)	AR-505FL	AR-505FL= (AR-505JL) ×10
20	MC Unit	MC Unit ×10		AR-330MC	AR-330MC= (AR-330NC) ×10
21	Curl Adjustment Roller	Curl Adjustment Roller ×10	250K (×10)	AR-505KR	AR-505KR= (AR-505JR) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## E. Middle East / Africa

## AR-250/280/281/285/286/335/336

No.	ITEM	CONTENTS	LIFE	MODEL NAME		REMARKS
				AR-280/285/ 335	AR-250/281/ 286/336	
1	Drum	OPC Drum ×1	160K	AR-330DM	AR-336DM	
2	Developer (Black)	Developer (800g) ×10	80K (×10)	AR-330LD (AR-330DV)	AR-336LD (AR-336DV)	AR-330LD = (AR-330DV) × 10 AR-336LD = (AR-336DV) × 10
3	Toner (Black)	Toner Cartridge (700g) ×10	17.5K (×10)	AR-330LT (AR-330T)	AR-400LT (AR-400T)	AR-330LT = (AR-330T) × 10 AR-400LT = (AR-400T) × 10
4	80K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1	80K	AR-330KA		
5	160K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1	160K	AR-330KB		
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11		Cartridge for AR-FN1 Common with S55,S55 N
7	Staple Cartridge	Staple Cartridge (SF-SC12) ×3	5K staples ×3	SF-LS12		Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) ×3
8	Cleaner Blade	Cleaner Blade ×10	80K (×10)	AR-330CB		AR-330CB= (AR-330BL) ×10
9	Upper Heat Roller	Upper Heat Roller ×1	160K	AR-330HU		
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	80K (×10)	SF-216UP		SF216UP=SF-216TP (incl.4 pawls) ×10
11	Heat Roller Gear	Heat Roller Gear ×10	160K (×10)	SF-216HG		SF216HG= (SF216JG) ×10
12	Lower Heat Roller	Lower Heat Roller ×1	160K	AR-330HR		
13	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	80K (×10)	SF-240LP		SF240LP=SF-240MP (incl.2 pawls) ×10
14	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	80K (×10)	SF-240DP		SF240DP=SF-240EP (incl.2 pawls) ×10
15	Screen Grid	Screen Grid ×10	80K (×10)	AR-330SU		AR-330SU= (AR-330TU) ×10
16	Charging Plate	Charging Plate ×10	80K (×10)	AR-330PU		AR-330PU= (AR-330NU) ×10
17	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB		
18	Busing	Busing ×2 ×10	160K (×10)	SF-240BU		SF-240BU= (SF-240DU) ×10
19	Ozone Filter	Ozone Filter ×10	80K (×10)	AR-330FL		AR-330FL= (AR-330JL) ×10
20	Copy Lamp	Copy Lamp ×10		AR-330CL		AR-330CL= (AR-330DL) ×10
21	MC Unit	MC Unit ×10		AR-330MC		AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## AR-405

No.	ITEM	CONTENTS		LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum	×1	180K	AR-400DM	
2	Developer (Black)	Developer (800g)	×10	90K (×10)	AR-400LD	AR-400LD = (AR-400DV) × 10
3	Toner (Black)	Toner Cartridge (700g)	×10	22K (×1)	AR-400LT	AR-400LT = (AR-400T) × 10
4	90K PM Kit	Cleaner Blade Charging Plate Unit Waste Toner Bottle Fusing Separation Pawl (upper) Fusing Separation Pawl (lower) Screen Grid Drum Separation Unit	×1 ×1 ×3 ×4 ×2 ×1 ×1	90K	AR-400KA	
5	180K PM Kit	Upper Heat Roller Lower Heat Roller Toner Receiving Seal DV Seal Heat Roller Gear	×1 ×1 ×1 ×1 ×1	180K	AR-400KB	
6	Staple Cartridge	Staple Cartridge (SF-SC11)	×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1 Common with S55,S55 N
7	Staple Cartridge	Staple Cartridge (SF-SC12)	×3	5K staples ×3	SF-LS12	Cartridge for AR-FN2 Common with S54 SF-LS12= (SF-SC12) ×3
8	Cleaner Blade	Cleaner Blade	×10	90K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
9	Upper Heat Roller	Upper Heat Roller	×1	180K	AR-400HU	
10	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4	×10	90K (×10)	SF-216UP	SF216UP=SF-216TP (incl.4 pawls) ×10
11	Heat Roller Gear	Heat Roller Gear	×10	180K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
12	Lower Heat Roller	Lower Heat Roller	×1	180K	AR-330HR	
13	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2	×10	90K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
14	Drum Separation Pawl	Drum Separation Pawl ×2	×10	90K (×10)	SF-240DP	SF240DP=SF-240EP (incl.2 pawls) ×10
15	Screen Grid	Screen Grid	×10	90K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
16	Charging Plate	Charging Plate	×10	90K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
17	Waste Toner Bottle	Waste Toner Bottle	×1		AR-330TB	
18	Busing	Busing ×2	×10	180K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
19	Ozone Filter	Ozone Filter	×10	90K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
20	Copy Lamp	Copy Lamp	×10		AR-330CL	AR-330CL= (AR-330DL) ×10
21	MC Unit	MC Unit	×10		AR-330MC	AR-330MC= (AR-330NC) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## AR-505

No.	ITEM	CONTENTS	LIFE	MODEL NAME	REMARKS
1	Drum	OPC Drum ×1	250K	AR-500DM	
2	Developer (Black)	Developer (800g) ×10	250K (×10)	AR-500LD (AR500DV)	(AR-500DV) ×10 = AR-500LD
3	Toner (Black)	Toner Cartridge (700g) ×10	25K (×10)	AR-500LT (AR-500T)	(AR-500T) ×10 = AR-500LT
4	125K PM Kit	Cleaner Blade ×1 Charging Plate Unit ×1 Waste Toner Bottle ×3 Fusing Separation Pawl (upper) ×4 Fusing Separation Pawl (lower) ×2 Screen Grid ×1 Drum Separation Unit ×1 Cleaning Roller ×1	125K	AR-505KA	
5	250K PM Kit	Upper Heat Roller ×1 Lower Heat Roller ×1 Toner Receiving Seal ×1 DV Seal ×1 Heat Roller Gear ×1 Curl Adjustment Roller ×1 Upper CL Roller Unit ×1	250K	AR-505KB	
6	Staple Cartridge	Staple Cartridge (SF-SC11) ×3	5K staples ×3	SF-SC11	Cartridge for AR-FN1/FN1N/FN3 Common with S55,S55 N
7	Cleaner Blade	Cleaner Blade ×10	125K (×10)	AR-330CB	AR-330CB= (AR-330BL) ×10
8	Upper Heat Roller	Upper Heat Roller ×1	250K	AR-505HU	
9	Fusing Separation Pawl (upper)	Fusing Separation Pawl (upper) ×4 ×10	125K (×10)	AR-505UP	AR-505UP=AR-505TP (incl.4 pawls) ×10
10	Heat Roller Gear	Heat Roller Gear ×10	250K (×10)	SF-216HG	SF216HG= (SF216JG) ×10
11	Lower Heat Roller	Lower Heat Roller ×1	250K	AR-505HR	
12	Fusing Separation Pawl (lower)	Fusing Separation Pawl (lower) ×2 ×10	125K (×10)	SF-240LP	SF240LP=SF-240MP (incl.2 pawls) ×10
13	Drum Separation Pawl	Drum Separation Pawl ×2 ×10	125K (×10)	AR-505DP	AR-505DP=AR-505EP (incl.2 pawls) ×10
14	Screen Grid	Screen Grid ×10	125K (×10)	AR-330SU	AR-330SU= (AR-330TU) ×10
15	Charging Plate	Charging Plate ×10	125K (×10)	AR-330PU	AR-330PU= (AR-330NU) ×10
16	Waste Toner Bottle	Waste Toner Bottle ×1		AR-330TB	
17	Busing	Busing ×2 ×10	250K (×10)	SF-240BU	SF-240BU= (SF-240DU) ×10
18	Ozone Filter	Ozone Filter ×10	125K (×10)	AR-330FL	AR-330FL= (AR-330JL) ×10
19	Ozone Filter 50	Ozone Filter 50 ×10	125K (×10)	AR-505FL	AR-505FL= (AR-505JL) ×10
20	MC Unit	MC Unit ×10		AR-330MC	AR-330MC= (AR-330NC) ×10
21	Curl Adjustment Roller	Curl Adjustment Roller ×10	250K (×10)	AR-505KR	AR-505KR= (AR-505JR) ×10

Note: Maintenance parts other than mentioned above must be ordered through the parts department using the proper part number.

## 2. Copy paper

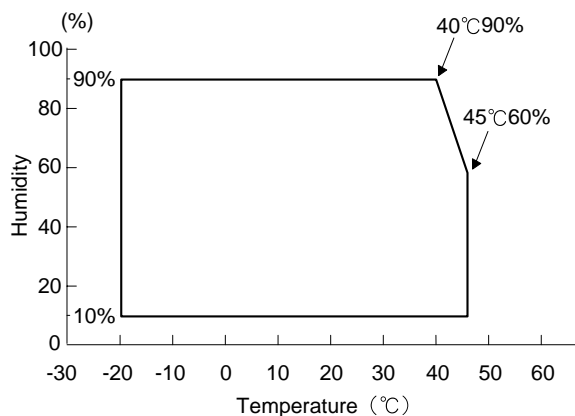
The following conditions for copy quality and transportability of PPC paper must be satisfied. The values are at temperature of  $20 \pm 1^\circ\text{C}$  and  $65 \pm 2\%$  RH.

Item	Standard
Weight	56 ~ 80g/m <sup>2</sup>
Smoothness	Face: 20 sec or above (BEKK method) Back: 20 sec or above (BEKK method)
Rigidity	Length 17cm or above, width 13cm or above (CLARK method)
Thickness	75 ~ 110 $\mu$
Dimensions	Standard dimensions $\pm 1\text{mm}$ (5/128") B4 ( $257 \pm 1 \times 364 \pm 1\text{mm}$ ) B5 ( $182 \pm 1 \times 257 \pm 1\text{mm}$ ) B6 ( $128 \pm 1 \times 182 \pm 1\text{mm}$ ) A3 ( $297 \pm 1 \times 420 \pm 1\text{mm}$ ) A4 ( $210 \pm 1 \times 297 \pm 1\text{mm}$ ) A5 ( $148 \pm 1 \times 210 \pm 1\text{mm}$ ) A6 ( $105 \pm 1 \times 148 \pm 1\text{mm}$ ) 11" $\pm 5/128 \times 17"$ $\pm 5/128$ inch 8.5" $\pm 5/128 \times 14"$ $\pm 5/128$ inch 8.5" $\pm 5/128 \times 11"$ $\pm 5/128$ inch 5.5" $\pm 5/128 \times 8.5"$ $\pm 5/128$ inch 8.5" $\pm 5/128 \times 13"$ $\pm 5/128$ inch

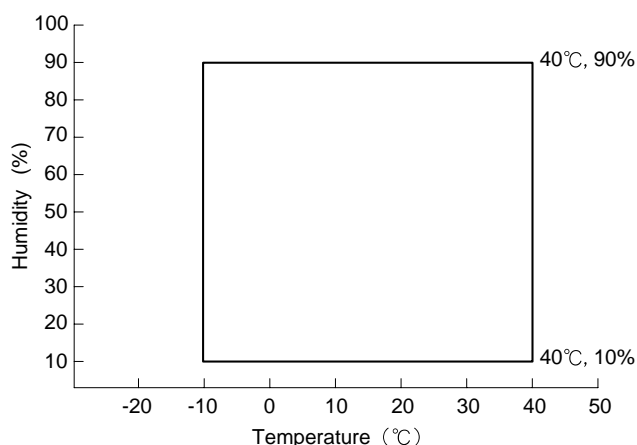
## 3. Environment conditions

### A. Transport conditions

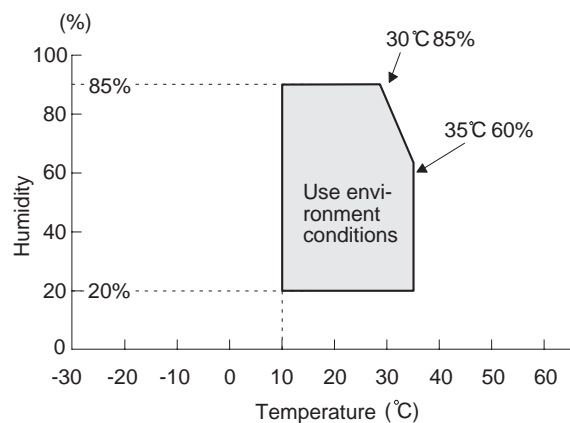
#### 1) Transport condition



#### 2) Storage condition (packed conditions)



## B. Use conditions



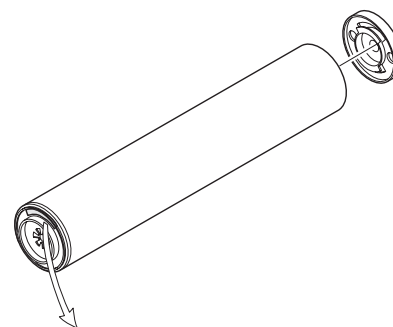
## C. Life (packed conditions)

Photoconductor drum (36 months from the production month)

Developer, toner (24 months from the production month)

## 4. Production number identification

### A. Photoconductor drum



#### <TYPE A>

1	2	3	4	5	6	7	8	9	10
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	AR-280/285/335	AR-250/281/286/ 336/405
1	Numeral The sensitivity of the photo conductor.	
2	Alphabet The model code, "C" for this model.	Alphabet The model code, "D" for this model.
3	Numeral The last digit of the production year.	
4	Numeral or X, Y, Z The production month. X means October, Y November, and Z December.	
5, 6	Numeral The production day	
7	Numeral or X, Y, Z The packing month. X stands October, Y November, and Z December.	
8, 9	Numeral The packing day.	
10	Alphabet The division of the production factory.	

## &lt;TYPE B&gt; (AR-280/285/335/501/505)

11

1	2	3	4	5	6	7	8	9	10
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1	Numeral This function: "2"
2, 3	Alphabet The applicable model. PC (AR-280/285, 335), PH (AR-505) for this model.
4	Numeral The last digit of the production year.
5	Numeral or X, Y, Z The production month. X stands for October, Y November, and Z December.
6	Numeral The production lot.
7	Numeral The distinction of sub lot.
8	Numeral or X, Y, Z The packing month. X stands for October, Y November, and Z December.
9, 10	Numeral The packing day.
11	Numeral or alphabet The product name of the drum. (except AR-501/505)

**B. Developer/Toner****AR-280/285/335**

1	2	3	4	5	6	—	7
---	---	---	---	---	---	---	---

1, 2, 3	Numeral The production lot.
4	Numeral The distinction of sub lot.

**AR-405/501/505**

## &lt;Developer&gt;

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1	Alphabet The manufacturing factory.
2	Figure The end digit of the production year.
3, 4	Figures The production month.
5, 6, 7, 8	Figures The manufacturing factory management number

## &lt;Toner&gt;

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1	Numeral The last digit of the production year.
2	Numeral or alphabet The first digit of the serial No.
3, 4, 5, 6, 7	Numeral Serial No. of one month production
8	Numeral or alphabet The production month.

**AR-250/281/286/336**

## &lt;Developer&gt;

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

1	Alphabet The manufacturing factory.
2	Numeral The last digit of the production year.
3, 4	Numeral The production month.
5, 6, 7	Numeral The last 3 digits of 4-digit production lot number of developer.
8	Numeral Distincts the production lot every 100 cases.

## &lt;Toner&gt;

None

## &lt;Example&gt;

C9112102	C	The manufacturing factory
9		The year is 1999.
11		The production month is November.
210		The production lot number is 1210.
2		This lot is between 101th case and 200th case production this month.



## [4] INSTALLATION AND SETUP

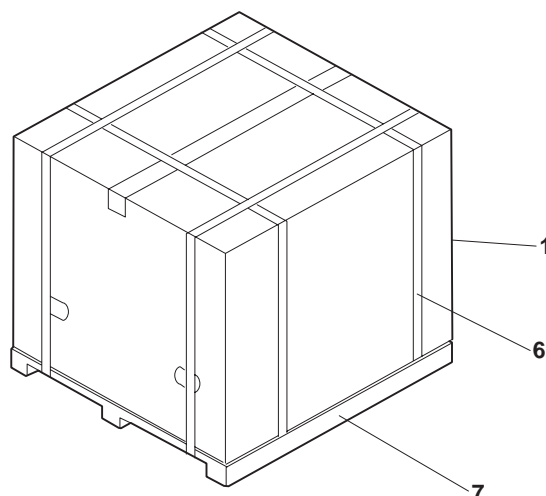
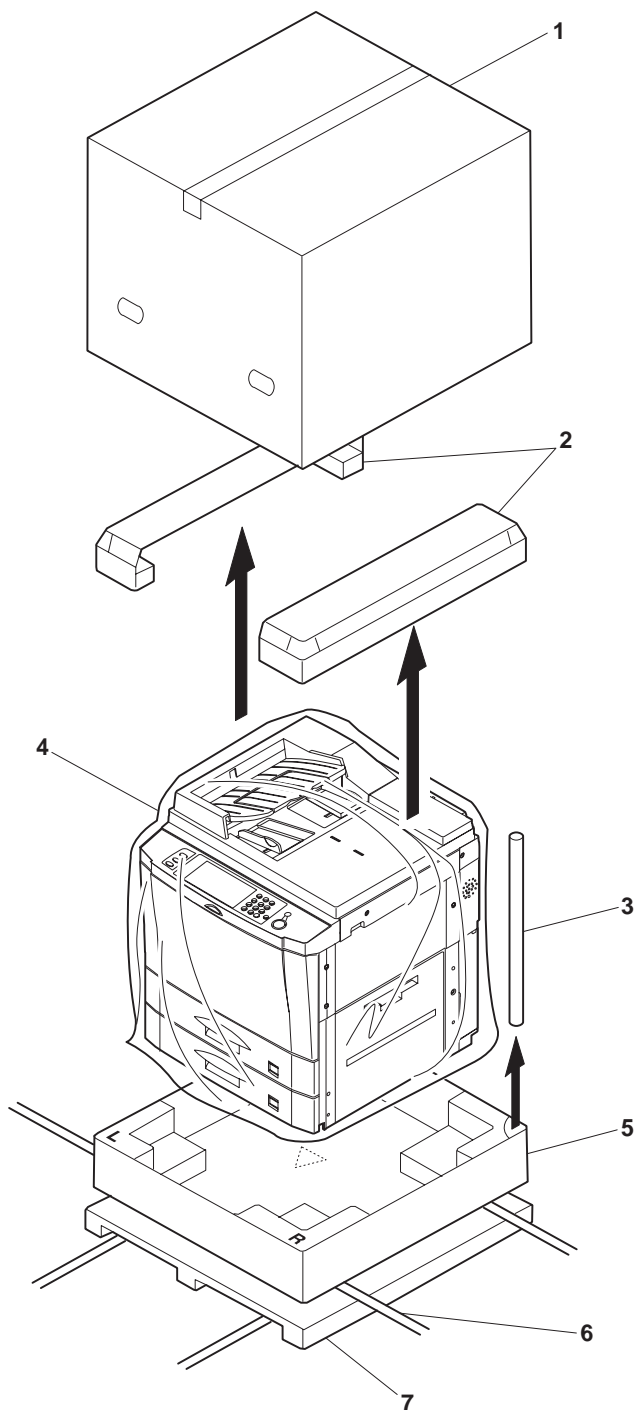
### (Copier installation)

#### 1. Unpacking procedures

##### (1) Packing form

Unpack the copier package in the following procedures.

- 1) Remove the PP bands (4 pcs.).
- 2) Remove the packing case.
- 3) Remove the internal packing pad.
- 4) Remove the copier body.

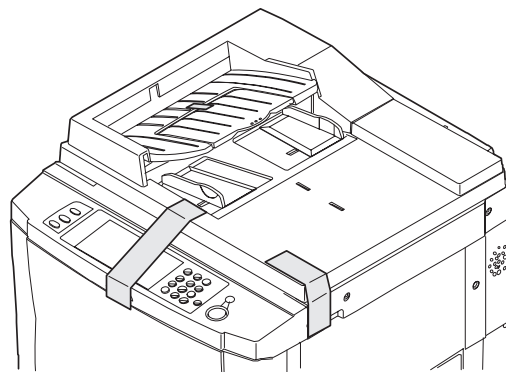


1	Packing case
2	Top pad
3	Support
4	Copier body
5	Bottom case
6	PP band
7	Skid unit

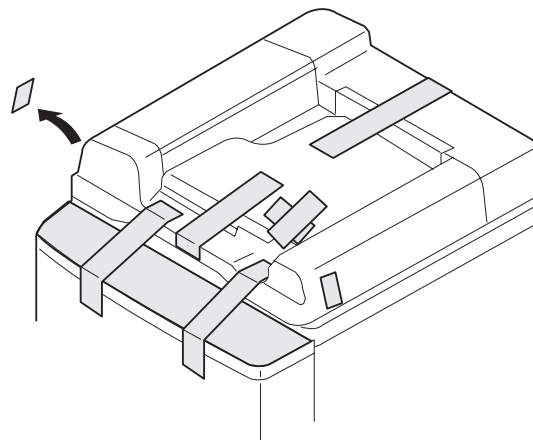
##### (2) Protection material and fixing material removal

- 1) Remove the fixing tape of the copier body.

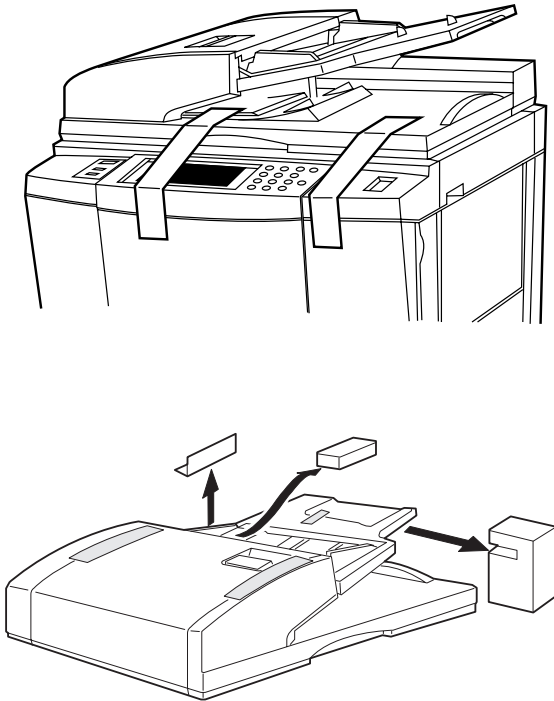
In the case of SPF



In the case of RADF

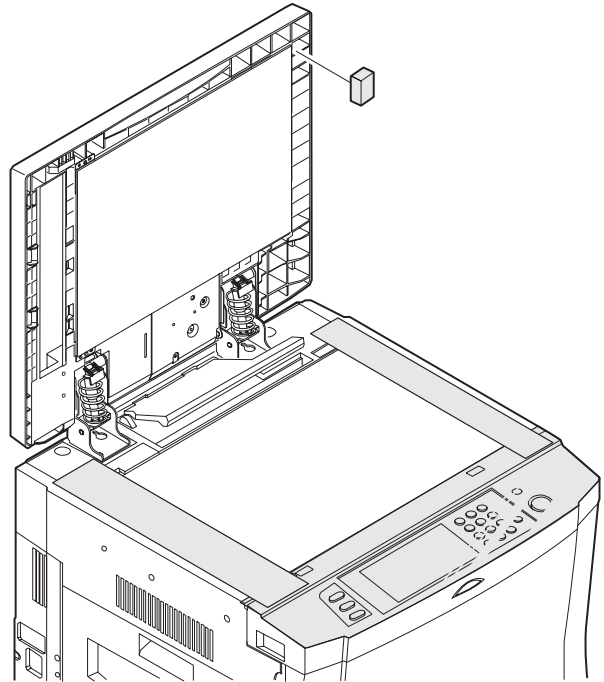


## In the case of RSPF

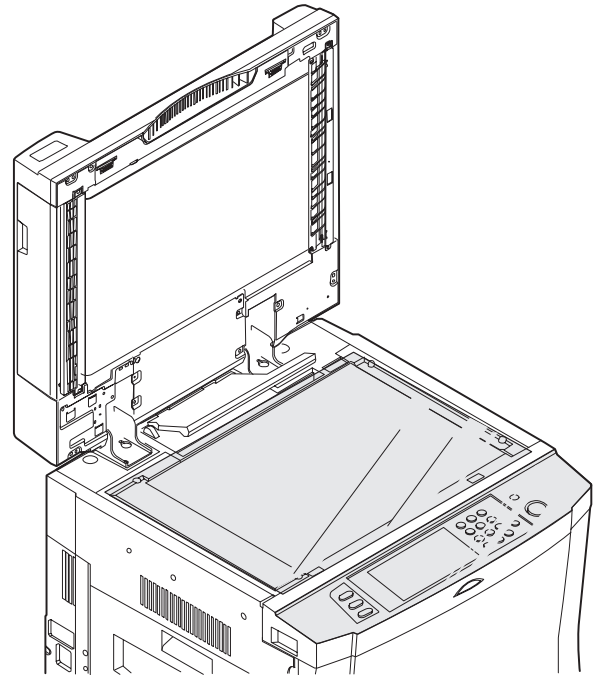


## 2) Remove the protection material and protection sheet.

## In the case of SPF

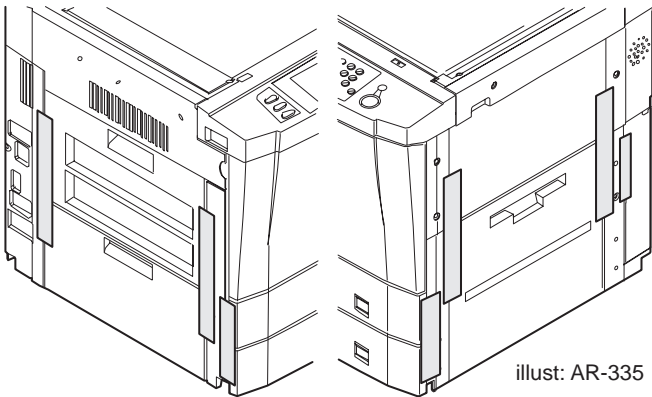


## In the case of RADF



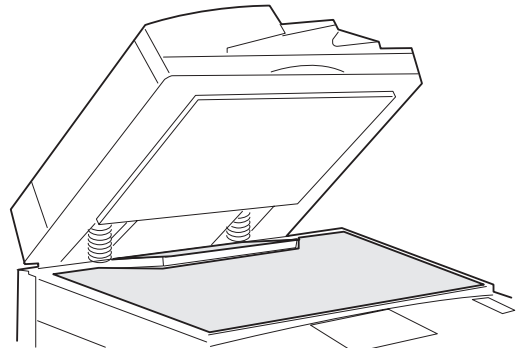
## • Paper exit side

## • Paper feed side



illust: AR-335

## In the case of RSPF



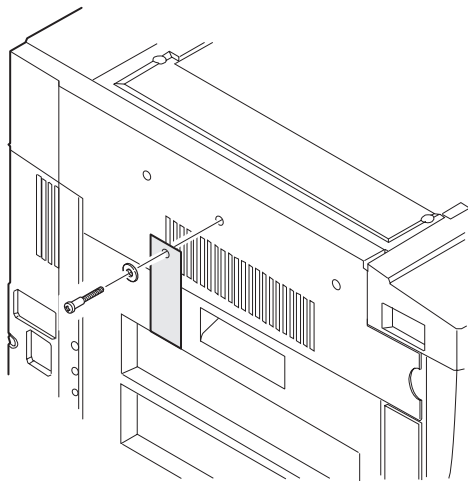
## 2. Installing procedure

### (1) Copier body

#### A. Optical system lock release

- 1) Release the No. 2/3 mirror unit lock.

Remove the fixing screw (1 pc.) of the No. 2/3 mirror unit on the left side.

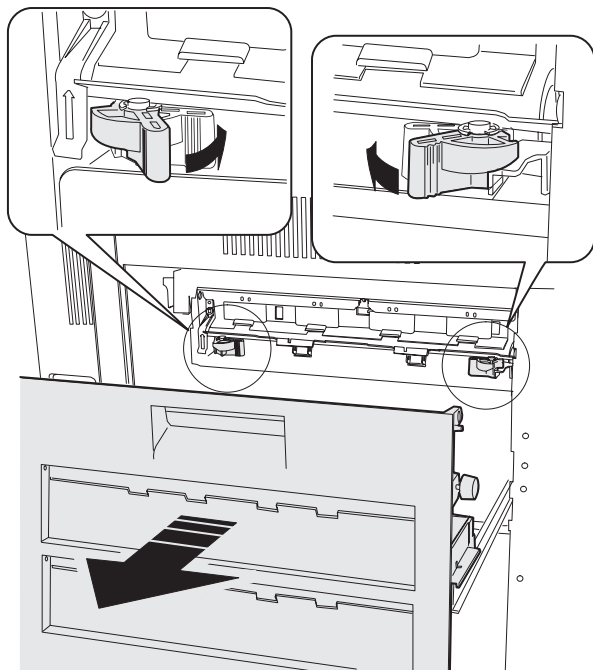


#### B. Fusing unit

Heat roller pressure check

- 1) Pull out the tray paper exit unit from the copier.
- 2) Check that the heat roller is in pressing state.  
(Factory setting: The heat roller is set in pressing state before shipment.)

AR-280/285/335



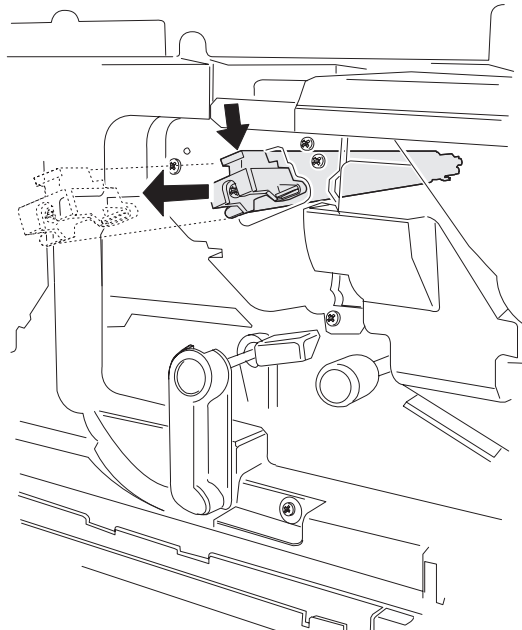
AR-250/281/286/336/405/501/505

Since the pressure lever is not installed, there is no need to check.

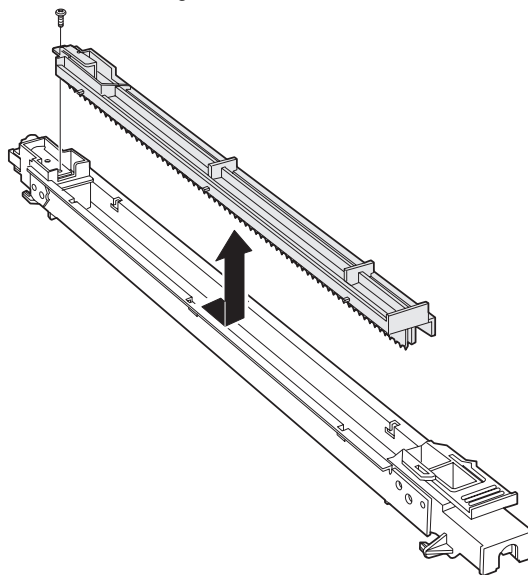
### C. Charger cleaning

Main charger unit electrode cleaning

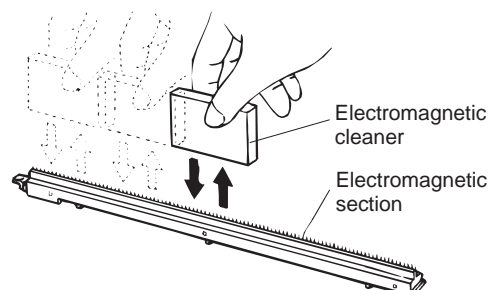
- 1) Open the front cabinet
- 2) Press the hook section of the main charger unit to release lock. Pull out and remove the main charger unit from the copier body.



- 3) Remove the fixing screw (1 pc.) of the electrode section on the back of the main charger unit.



- 4) Push the electrode cleaner onto the electrode tip so that the electrode tip comes into the electrode cleaner to clean. (repeat two or three times.)

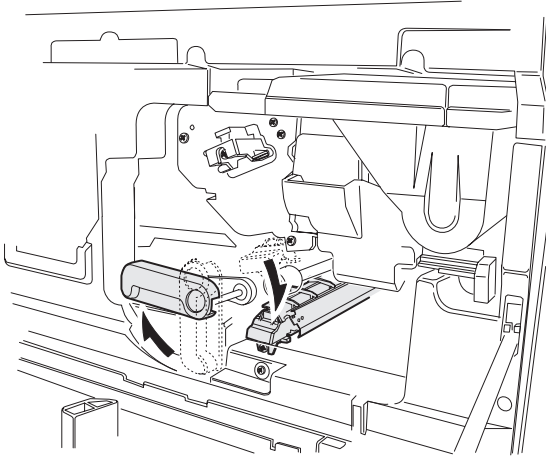


**Note:** Do not move the electrode cleaner with the electrode tip in it. When cleaning, clean all the electrodes evenly.

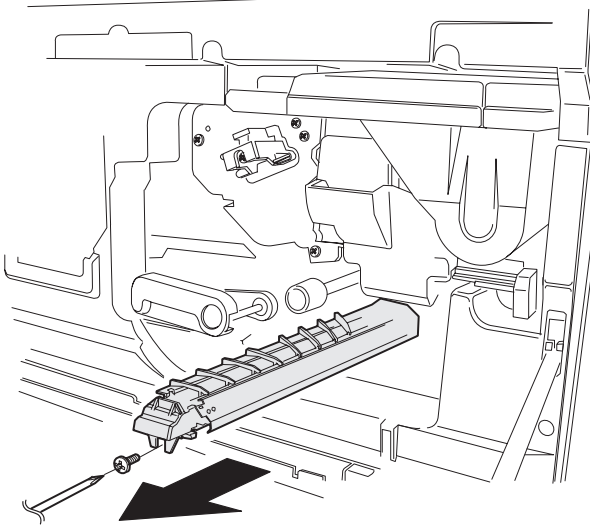
- 5) Install the electrode to the original position and fix with the fixing screw (1 pc.).
- 6) Insert the main charger unit completely into the copier along the guide groove.

#### Transfer/separation charger unit wire cleaning

- 1) Slightly lift the transport section open/close lever and tilt it to the right.

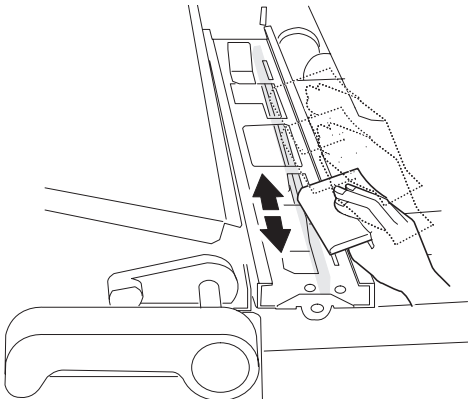


- 2) Remove the driver transfer separation charger fixing screw, and remove the transfer/separation charger unit from the copier body.

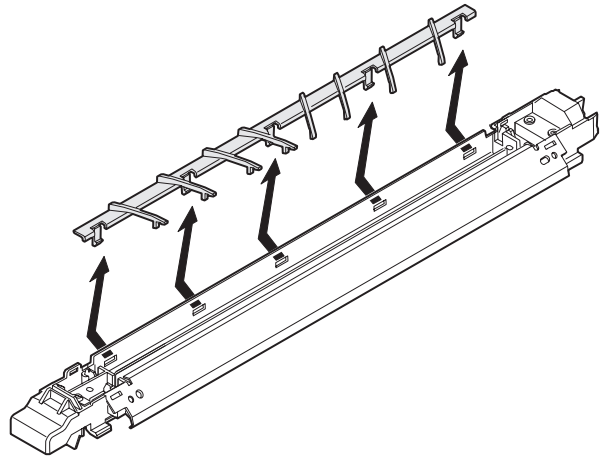


#### AR-501/505: Perform the following procedure if necessary.

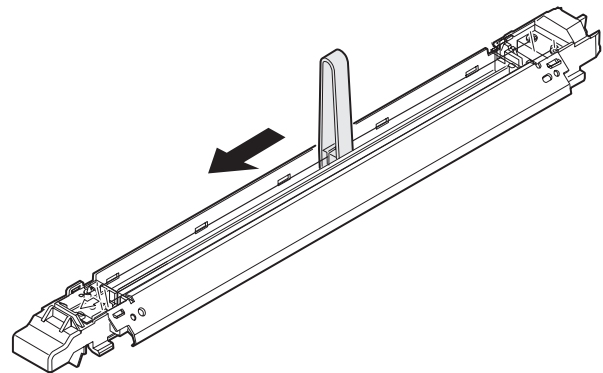
After removing the TC charger in procedure 2), wipe the lamp which can be seen from the square hole of the TC guide rail with waste cloth.



- 3) Remove the separation charger guide from the charger case.



- 4) Squeeze the transfer/separation charger wire with the charger cleaner, and move it in the direction of the arrow which is indicated on the charger to clean.

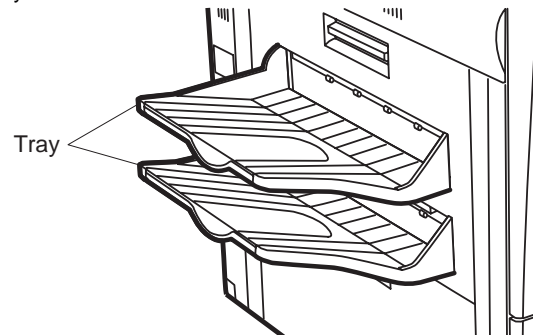


- 5) Install the separation charger to the charger case, and insert the transfer/separation charger unit along the guide groove completely to the bottom.

Then, tighten the transfer/separation charger fixing screw, return the transport section open/close lever to the left, and close the front cabinet.

#### D. Accessory installation

- 1) Tray installation



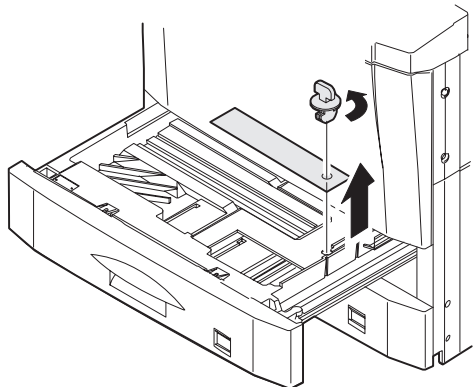
illust: AR-335

## E. Upper and lower trays setting

- 1) Remove the tray packing fixing screw.

Lift the tray holder, and pull out the tray from the copier body until it stops.

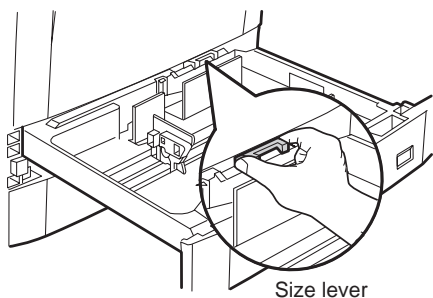
Remove the packing fixing screw (1 pc.) of the tray paper pressing plate.



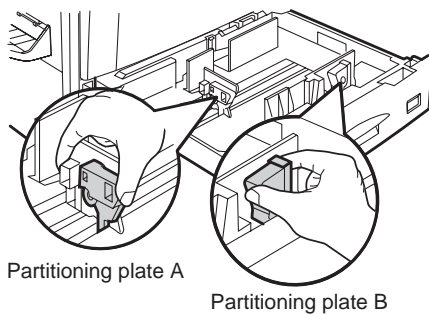
## F. Paper size change

- 1) Fit the tray size lever to the size of paper to be used.

(The size lever is of the slide type. Slide it right and left to fit with the size of paper to be used.)

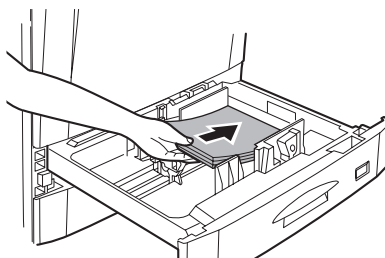


- 2) Fit the partitioning plates A and B to the paper size.

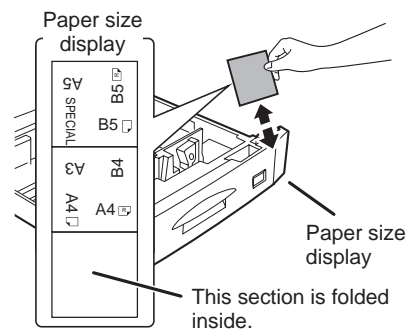


- 3) Put paper on the tray.

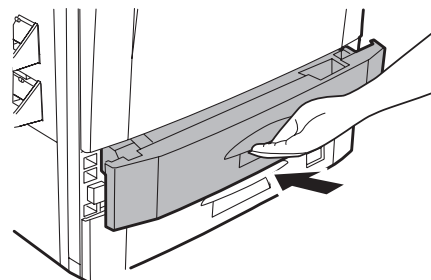
Set paper on the tray. At that time, do not exceed the indication line.



- 4) Change the display of the paper size display.



- 5) Install the tray.

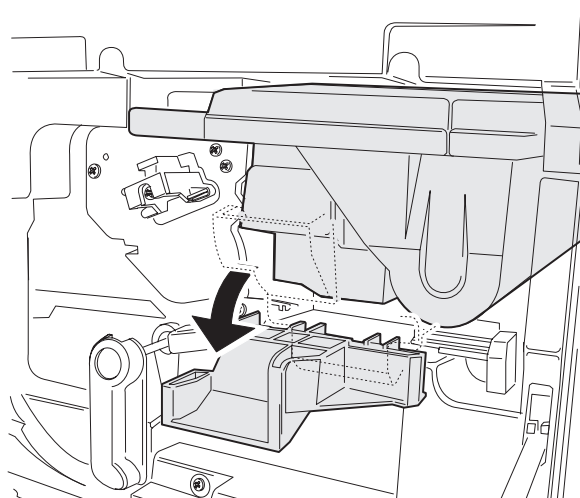


Note: Push the tray completely to the bottom.

## G. Developing unit setting

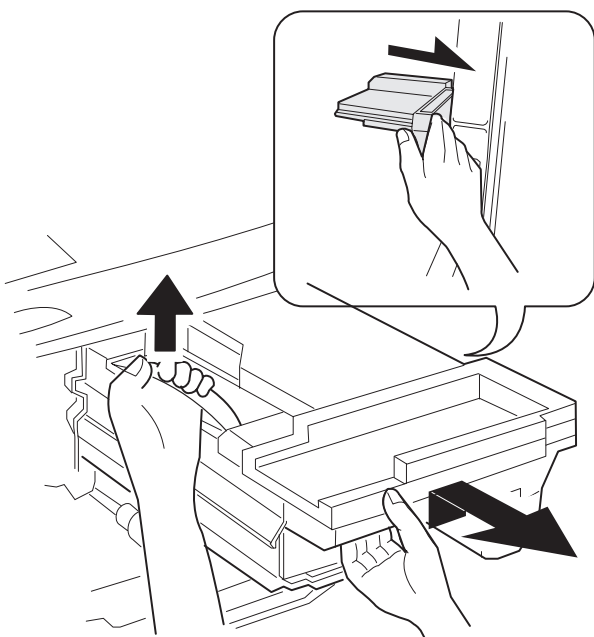
### (1) Remove the developing unit

- 1) Open the front cabinet.
- 2) Tilt the developing unit lever toward you, and pull out the toner cartridge until it stops.





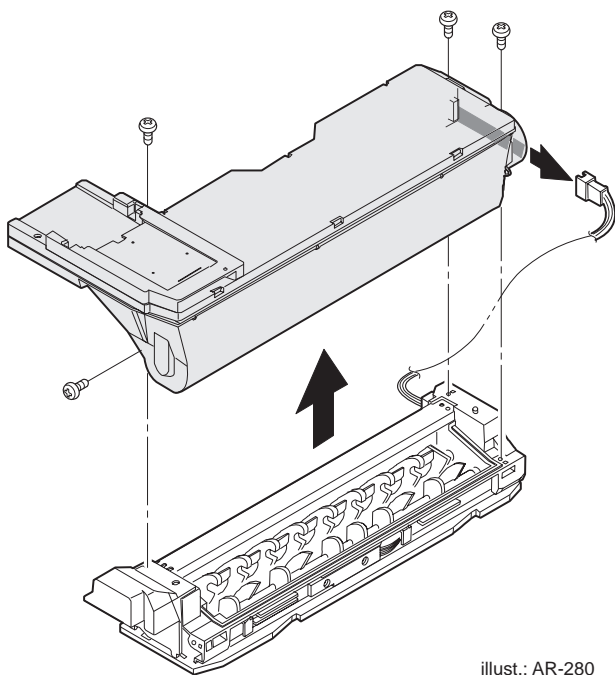
- 3) Slide the developing unit lock lever in the arrow direction to release lock. Hold the toner cartridge holder and slowly pull out the developing unit until it stops.



- 4) Hold the developing unit strap, slide the developing unit lock lever in the arrow direction again to release lock, and remove the developing unit.

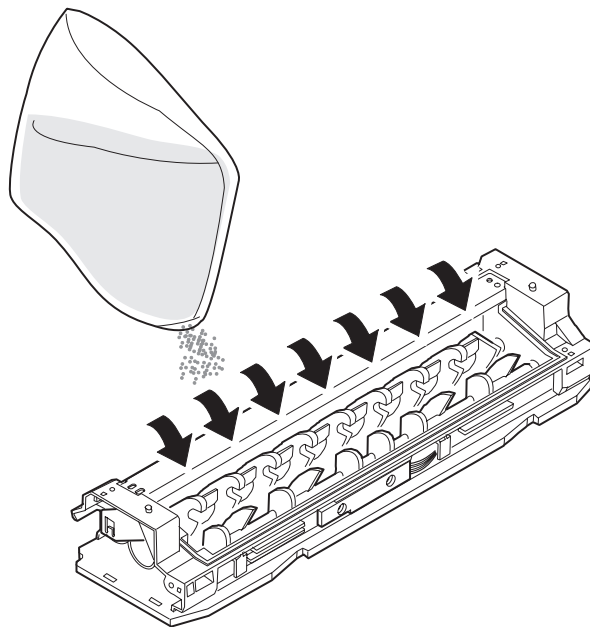
## (2) Supply developer.

- 1) Disconnect the 5P connector which connects the toner hopper and the developing unit. Then remove the toner hopper fixing screws (4 pcs.) of the developing unit.

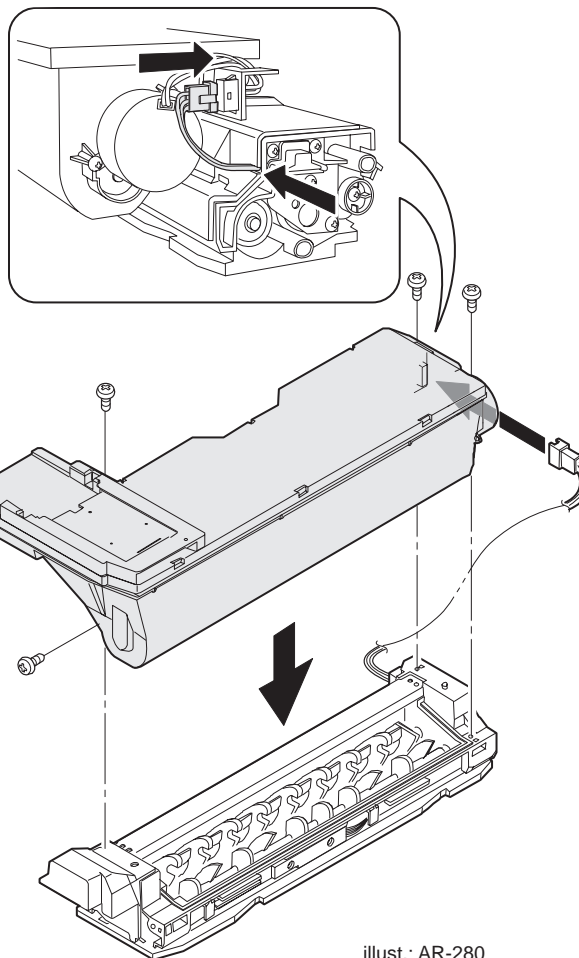


illust.: AR-280

- 2) Supply developer from the developer supply port of the developing unit.



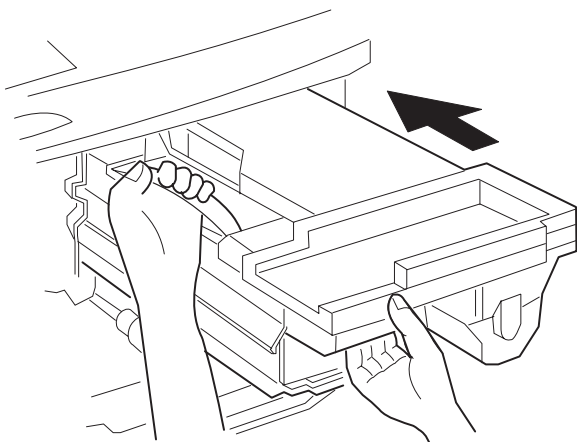
- 3) Fix the toner hopper to the developing unit with the fixing screws (4 pcs.) and connect the 5P connector between the toner hopper and the developing unit. At that time, put the 5P connector harness in the harness clamp attached to the toner hopper, and process the harness.



illust.: AR-280

### (3) Install the developing unit to the copier body.

Install the developing unit to the copier body and push it into the body completely. Close the developing unit lever and the front cabinet.



Note: Be careful that this procedure is different from the conventional simulation.

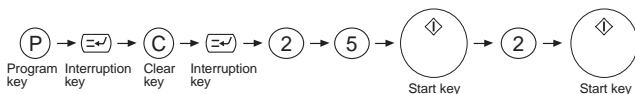
### H. Toner density sensor level adjustment

Turn on the power switch of the copier.

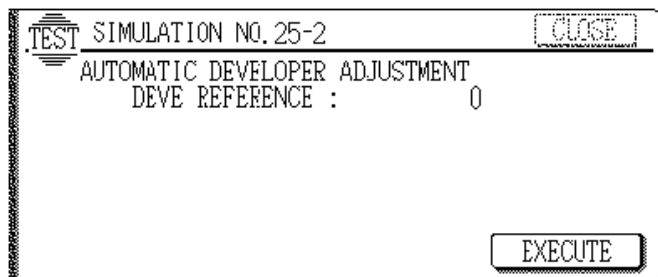
Note: Before executing SIM 25-1 or SIM 25-2, be sure to check that the main charger unit is securely inserted.

#### (1) Adjust the developing unit toner density sensor level.

1) Execute SIM 25-2



2) The touch panel shows the following display.



Touch the EXECUTE on the touch panel and execute SIM 25-2.

3) Adjustment is automatically made with the toner density sensor output value displayed. After 3 min from starting stirring, the toner density sensor is sampled 16 times and the average value is stored as the toner density adjustment value.

Note: When the simulation is canceled before completion, automatic reading cannot be made. Be careful not to cancel before completion.

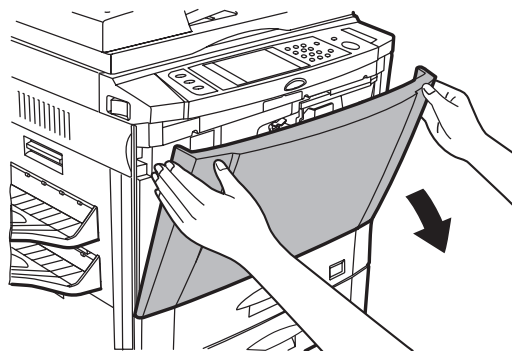
4) Press the [CA] key to cancel SIM 25.

Note: SIM 25-2 must be executed only when developer is replaced. For checking of the developer adjustment value in servicing, use SIM 25-1. (Use of SIM 25-2 to check the developer adjustment value in servicing may cause abnormality in the toner density transition.) Be careful that this simulation is different from the conventional simulations.

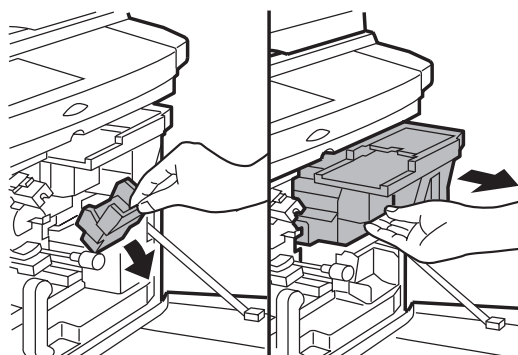
### I. Toner supply

#### (1) Supply toner.

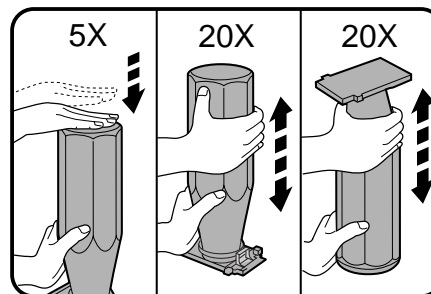
1) Open the front cover.



2) Tilt the toner box lever toward you, and pull out the toner box.

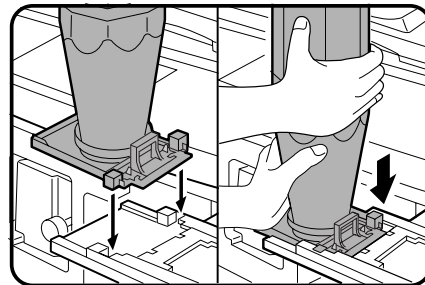


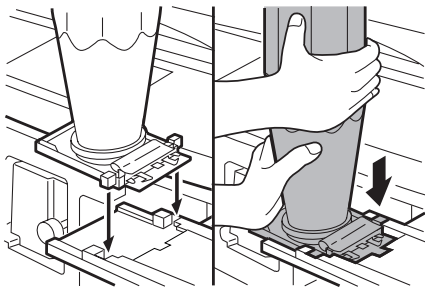
3) Tap the top of the toner cartridge several times, and shake the toner cartridge vertically about 20 times. Turn the toner cartridge upside down, and vigorously shake it vertically about 20 times again.



4) Attach the toner cartridge to the toner box.

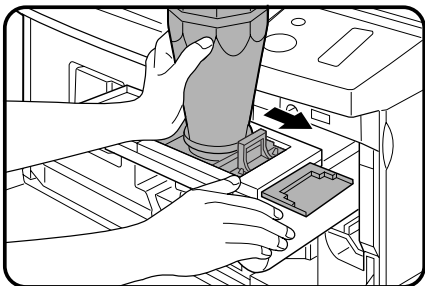
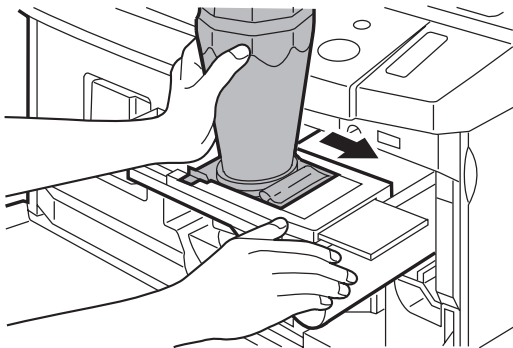
In the case of AR-501/505



**In the case of other models**

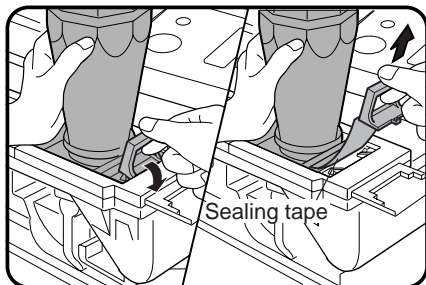
Insert two projections of the toner cartridge into the notches of the toner supply port.

- 5) Move the toner cartridge in the arrow direction until it stops.

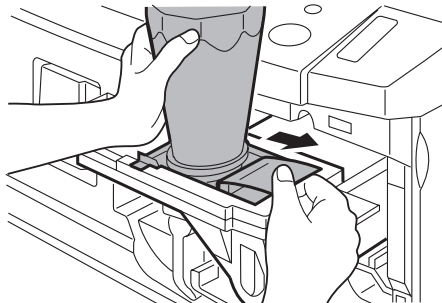
**In the case of AR-501/505****In the case of other models**

- 6) **In the case of AR-501/505**

Pull the lever in the direction of the arrow until it breaks off. Then pull the lever in the direction of the arrow to remove the seal.

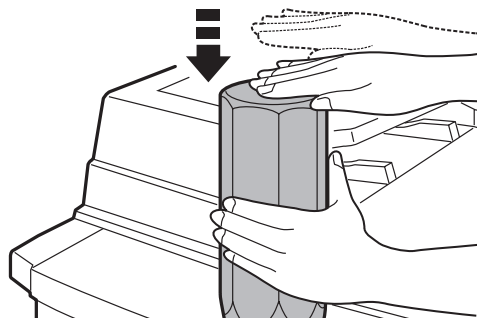
**In the case of other models**

Take off the seal end and slowly remove it.



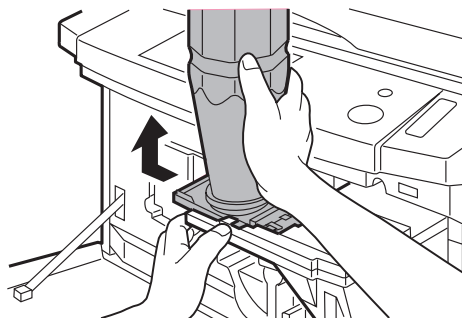
When removing the seal, hold and fix the toner cartridge.

- 7) Tap the top of the toner cartridge several times.

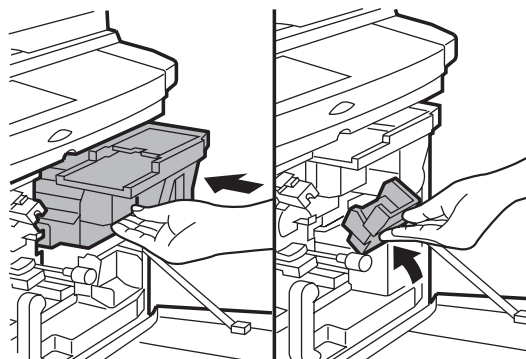


This is to shake off toner attached to the side surface of the toner cartridge.

- 8) Move the empty toner cartridge in the arrow direction and remove it.

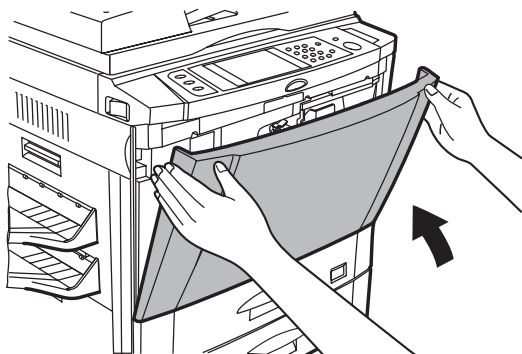


- 9) Push the toner box to the original position, and put the toner box lever to the original position.



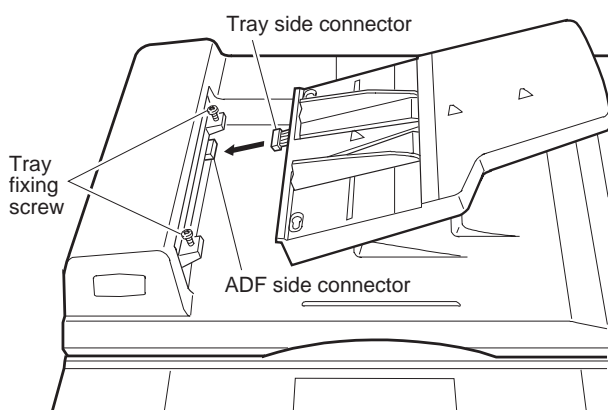


10) Close the front cabinet.



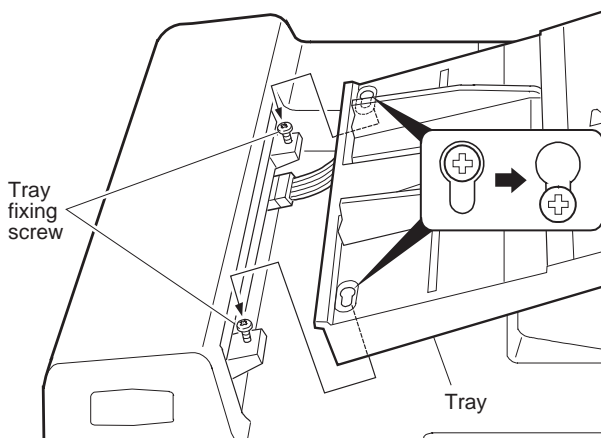
#### J. Connect the tray connector for RADF

\* Temporarily fix tray fixing screw (M4 x 8), and connect the RADF connector with the tray connector.



#### K. Install the tray

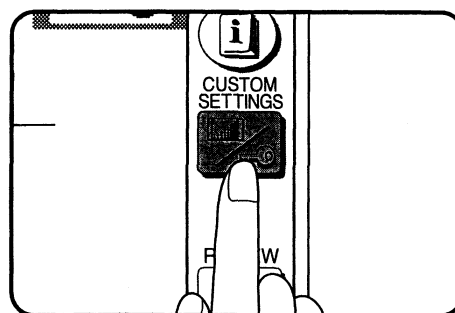
\* Install the tray as shown in the figure below, and tighten the fixing screws (2 pcs.).



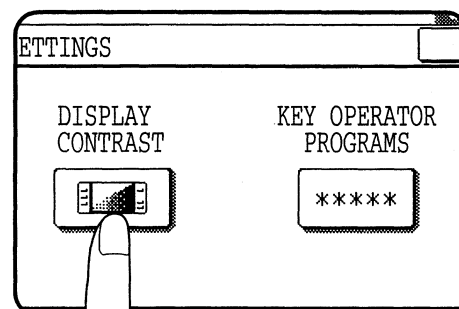
#### L. Others

##### (1) Touch panel contrast adjustment

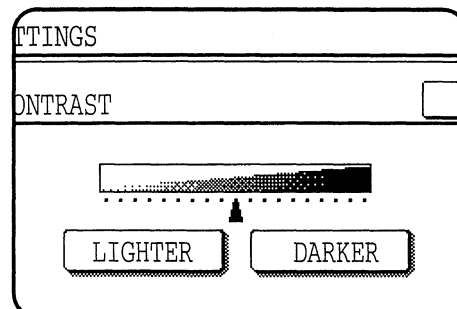
1) Press the CUSTOM SETTINGS key.



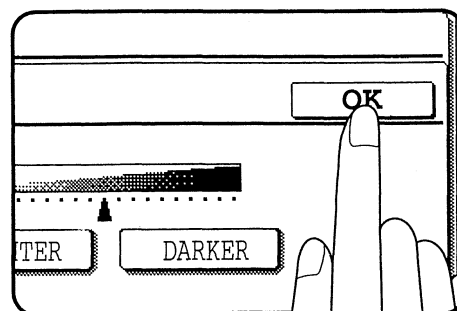
2) Press the "DISPLAY CONTRAST" key on the touch panel.



3) Press the "LIGHTER" or "DARKER" key to adjust the contrast.

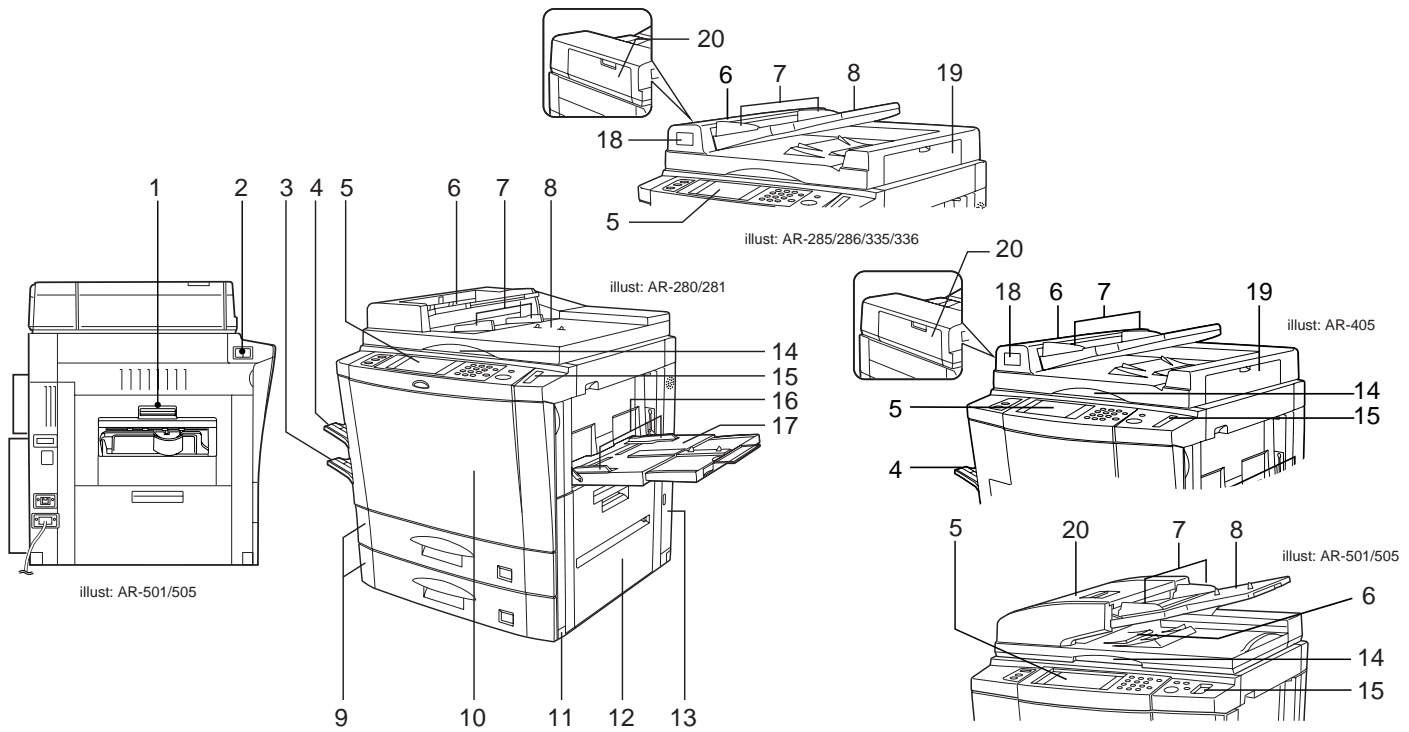


4) Press the "OK" key.



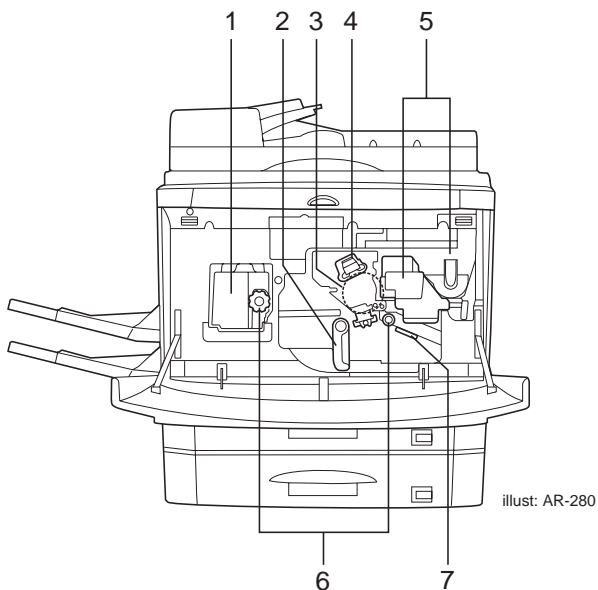
## [5] EXTERNAL VIEW AND INTERNAL STRUCTURE

### A. Exterior



1	Exit area cover	8	Document feeder tray	15	Paper clip tray
2	Power switch	9	Paper trays	16	Bypass tray paper guides
3	Second tray	10	Front cover	17	Bypass tray
4	Output tray	11	Handles	18	Document feeder indicators
5	Operation panel	12	Right side cover	19	RADF exit roller cover
6	SPF/RADF/RSPF exit area	13	Toner collecting container cover	20	RADF/RSPF feeding roller cover
7	Original guides	14	Document glass		

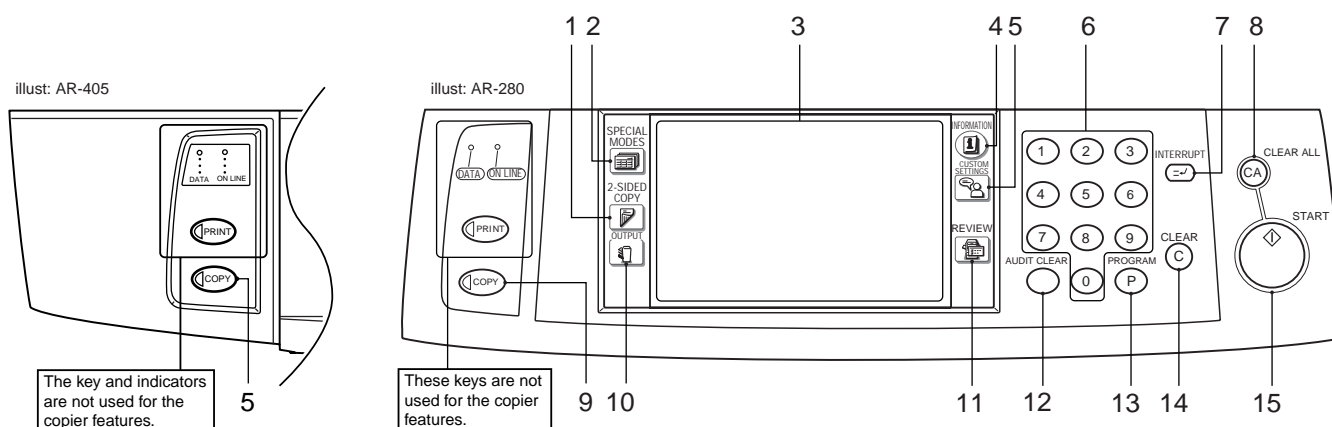
### B. Interior



1	Fusing unit
2	Transport lever
3	Photoconductive drum
4	Corona unit
5	Toner hopper
6	Roller rotating knobs
7	Paper guide

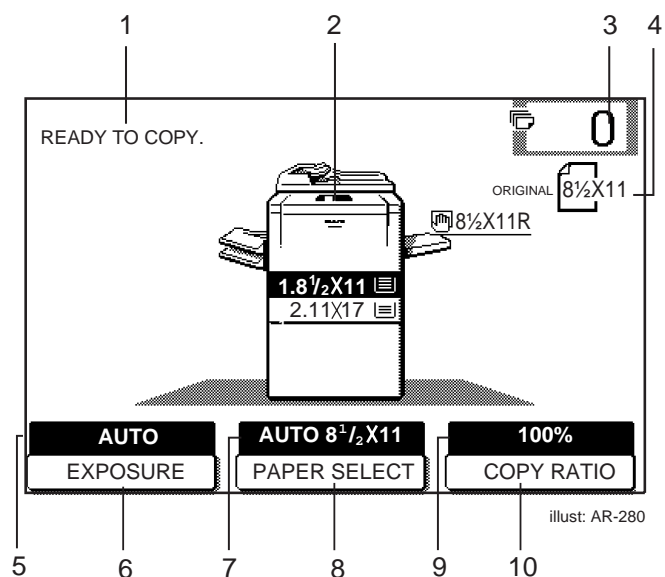
## C. Operation Panel

### (1) Key position



1	2-SIDED COPY key	9	COPY key
2	SPECIAL MODES key	10	OUTPUT key
3	LCD touch panel	11	REVIEW key
4	INFORMATION key	12	AUDIT CLEAR key
5	CUSTOM SETTINGS key	13	PROGRAM key
6	10-key pad	14	Clear key
7	INTERRUPT key and indicator	15	START key and indicator
8	CLEAR ALL key		

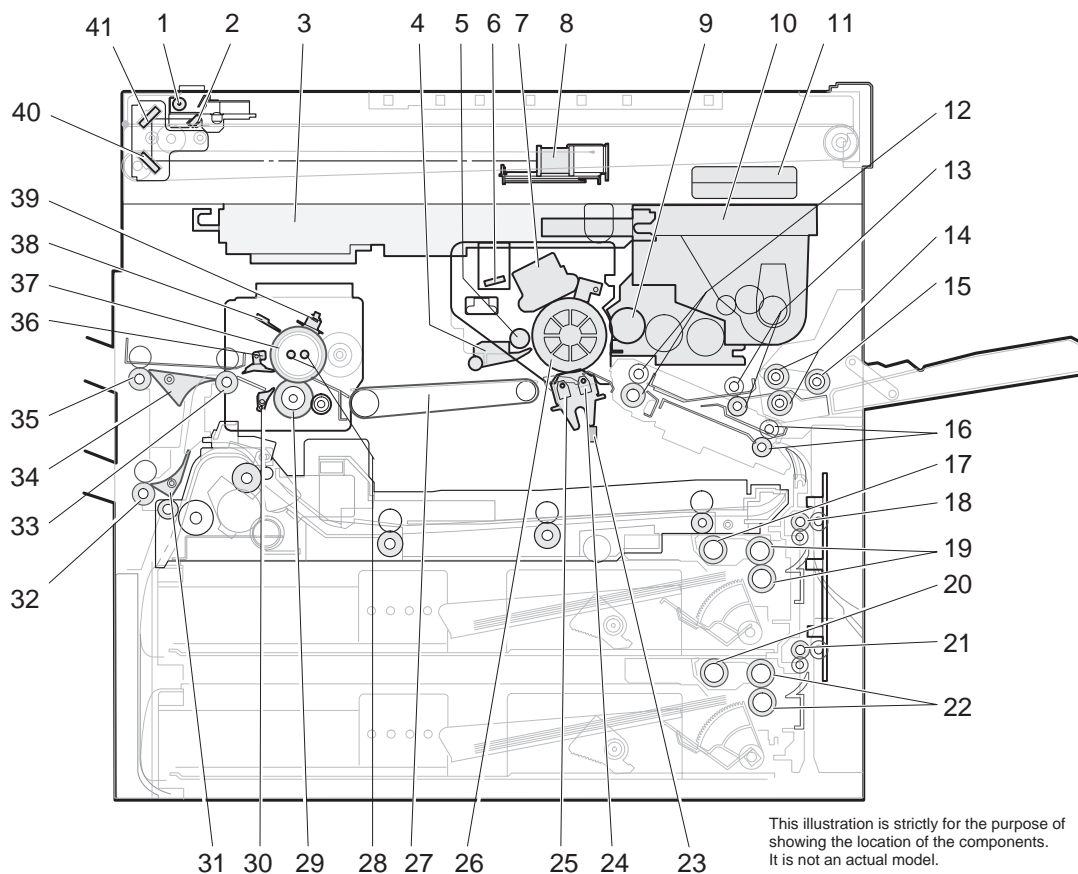
### (2) Touch Panel



1	Message display
2	Paper size display
3	Copy quantity display
4	Original size display
5	EXPOSURE display
6	EXPOSURE key
7	PAPER SELECT display
8	PAPER SELECT key
9	COPY RATIO display
10	COPY RATIO key

## 2. Copier body

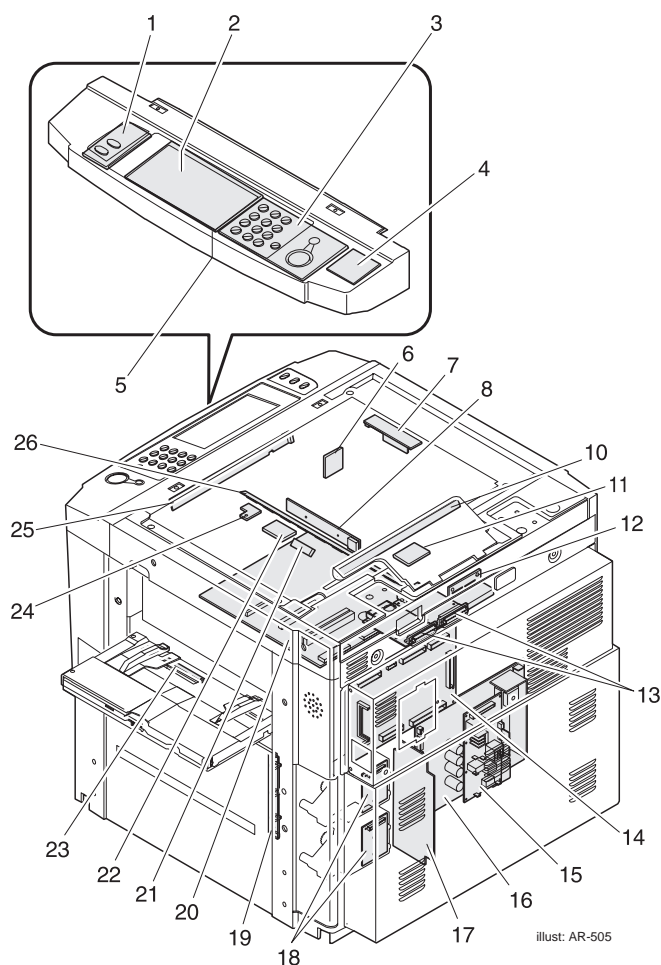
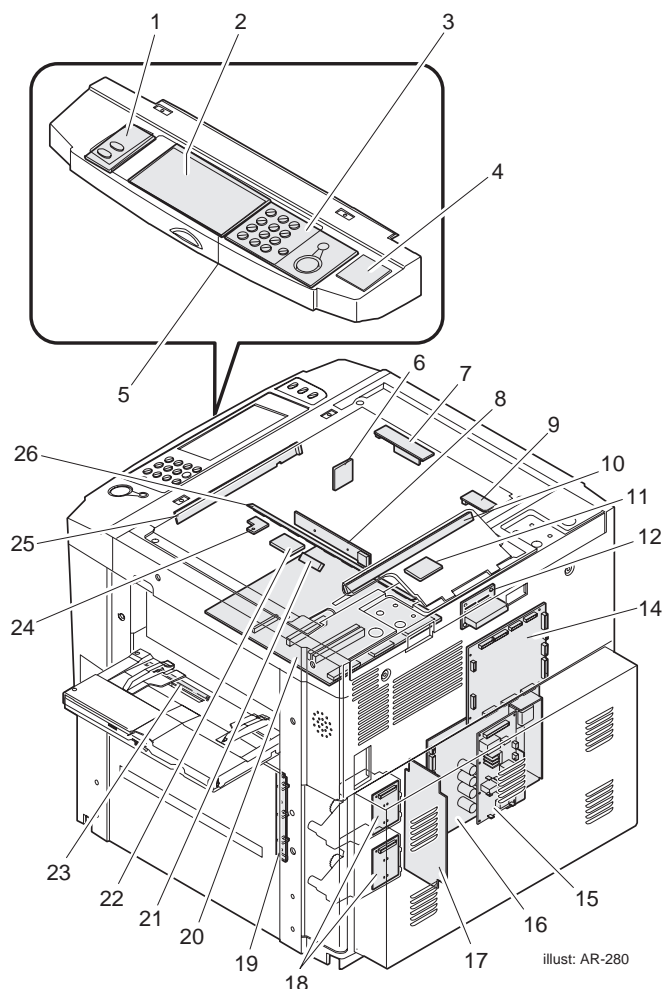
### A. Major parts



No.	Name
1	Copy lamp
2	No. 1 mirror
3	Laser scanning unit
4	Drum separation pawl
5	Waste toner collecting screw
6	Discharge lamp
7	Main charger
8	CCD unit
9	Developing unit magnet roller
10	Toner hopper
11	Hard disk
12	Resist roller
13	Paper transport roller
14	Manual paper feed tray separation roller
15	Manual paper feed tray paper feed roller
16	Paper transport roller
17	Upper tray paper feed roller
18	Paper transport roller 3
19	Upper tray paper separation roller
20	Lower tray paper feed roller
21	Paper transport roller 4

No.	Name
22	Lower tray paper separation roller
23	Separation lamp
24	Transfer charger
25	Separation charger
26	OPC drum
27	Suction belt
28	Fusing heater lamp (Outside/inside)
29	Lower fusing roller
30	Lower fusing roller separation pawl
31	Lower paper exit tray gate (AR-280/285/335/501/505 only)
32	Paper exit roller 3 (AR-280/285/335 only)
33	Paper exit roller 1 (Curl correction roller for AR-501/505)
34	Upper paper exit tray gate
35	Paper exit roller 2
36	Upper fusing roller separation pawl
37	Upper fusing roller
38	Thermistor (Outside/inside)
39	Thermostat
40	No. 3 mirror
41	No. 2 mirror

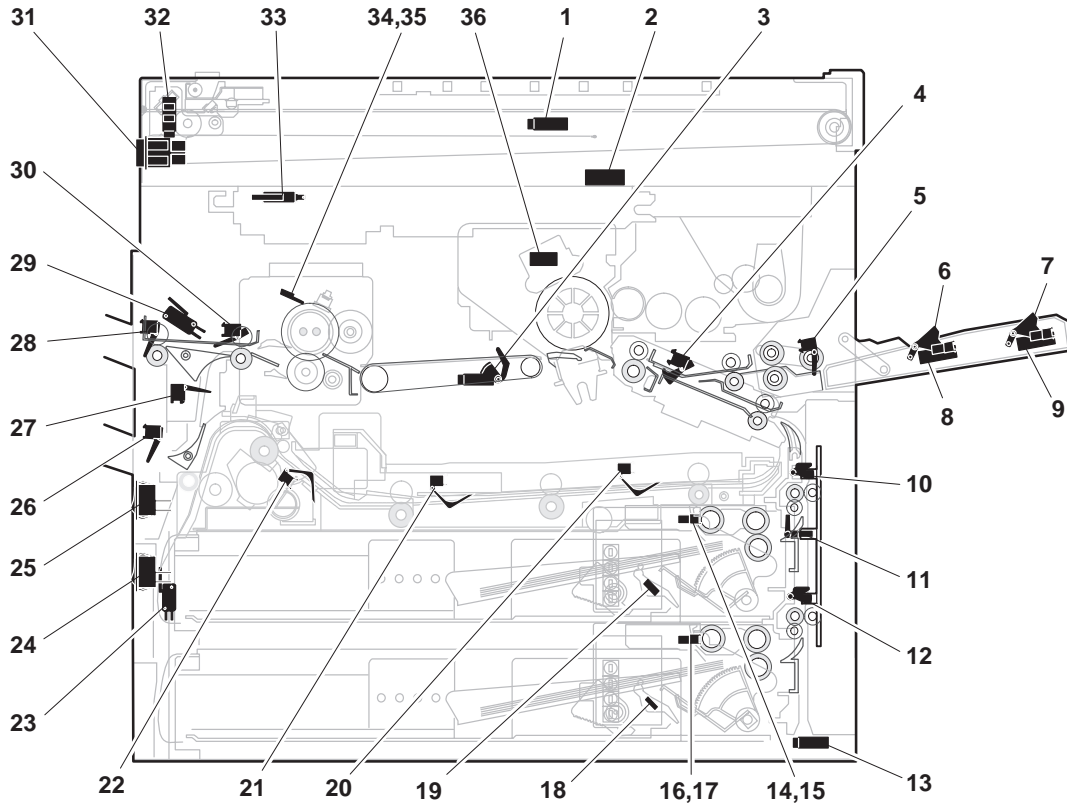
## B. PWB location



No.	Name	Function, operation
1	Operation key PWB L	Key input
2	LCD unit	Operation input, machine state display
3	Operation key PWB R	Key input
4	Invertor PWB	LCD backlight control
5	Operation control PWB	Operation input, display control
6	Fusing interface PWB	Fusing unit, PCU interface
7	Copy lamp lighting PWB	Copy lamp lighting control
8	CCD PWB	Document image input
9	Copy lamp lighting interface PWB	Copy lamp, PCU interface
10	Document size detecting PWB (Light emitting side)	Document size detection
11	Interface PWB	Interface between the copy lamp and the PCU
12	Scanner driver PWB	Optical system scanner unit drive
13	SCSI interface PWB	Interface between the ICU and the SCSI cable

No.	Name	Function, operation
14	PCU PWB	Overall control of the copier and options
15	AC power PWB	AC power input
16	DC power PWB	DC power supply
17	High voltage PWB	Process high voltage, bias voltage supply
18	Lift-up motor PWB	Paper tray bottom plate lift up
19	Paper transport sensor PWB	Paper transport detection
20	ICU PWB	Image process, image data communication control
21	Process thermistor PWB	Temperature detection in the process unit
22	Drum marking sensor PWB	
23	Multi feed tray paper size detection PWB	Document size detection
24	Process control PWB	
25	Document size detecting PWB (Light receiving side)	Document size detection
26	Discharge lamp PWB	OPC drum discharge

## C. Sensor location



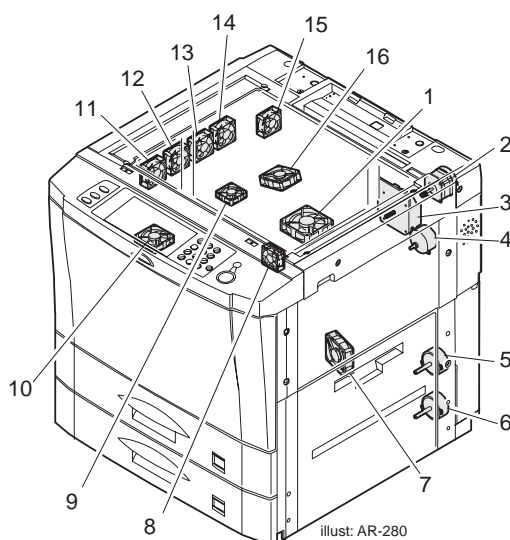
This illustration is strictly for the purpose of showing the location of the components.  
It is not an actual model.

No.	Signal name	Function, operation
1	OCSW	Document cover open/close detection
2	Operation PWB thermistor	Operation PWB peripheral temperature detection
3	PSD	Separation detection
4	PPD2	PS paper detection
5	MPED	Manual paper feed paper empty detection
6	MPLD1	Manual paper feed paper length detection 1
7	MPLD2	Manual paper feed paper length detection 2
8	MPLS1	Manual paper fed tray pull-out detection 1
9	MPLS2	Manual paper feed tray pull-out detection 2
10	PPD1	Paper transport detection 1
11	DSWR	Right door open/close detection
12	PFD	Paper transport detection 1
13	TFD	Waste toner full warning detection
14	LUD1	Upper cassette upper limit detection
15	PED1	Upper cassette paper empty detection
16	LUD2	Lower cassette upper limit detection
17	PED2	Lower cassette paper empty detection
18	LCSPD1	No. 2 tray paper remaining detection 1
19	UCSPD1	No. 1 tray paper remaining detection 1
20	DPPD3	ADU tray paper in detection 3
21	DPPD2	ADU tray paper in detection 2

No.	Signal name	Function, operation
22	DPPD1	ADU tray paper in detection 1
23	DSWLL	Left lower door open/close detection
24	DH SW	Dehumidifier heater switch
25	MEM SW	Memory switch
26	POD3	Paper exit detection (Second paper exit)
27	DSBD	ADU reverse section detection
28	POD2	Paper exit detection (ADU)
29	DSWL	Left upper door open/close detection
30	POD1	Paper exit detection (after fusing)
31	MAIN SW	Power switch
32	MHPS	No. 1 mirror home position detection
33	DSWF	Front cover open/close detection
34	Fusing section thermistor (Center)	Heat roller temperature detection
35	Fusing section thermistor (Sides)	Heat roller temperature detection
36	Process section thermistor	Process section peripheral temperature detection

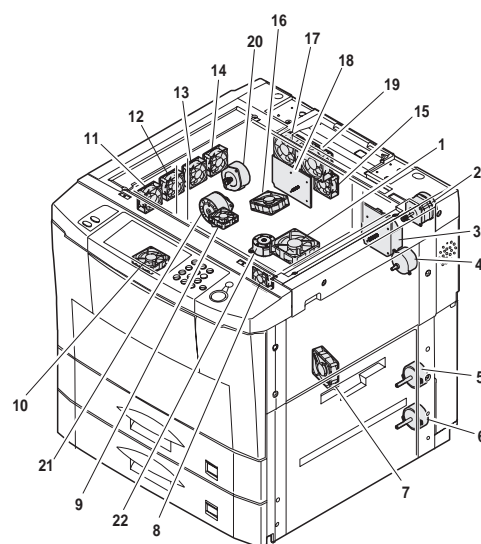


## D. Motor location



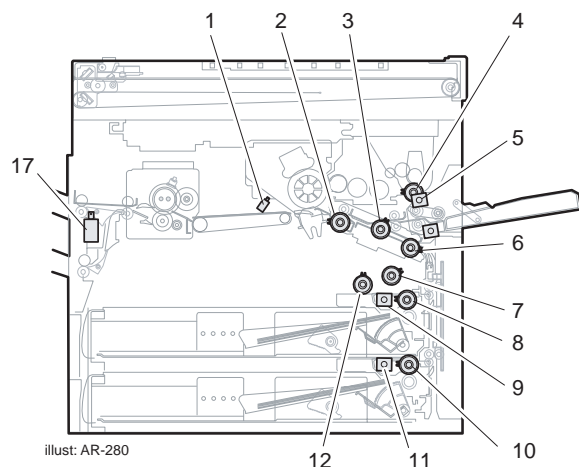
illustr: AR-280

No.	Abbreviation	Name	Type
1	SFM	Suction fan motor	Fan motor
2	SCM	Scanner motor	Stepping motor
3	MM	Main motor	Brushless motor
4	TM	Toner motor	Synchronous motor
5	LUM1	Upper stage lift-up motor	Synchronous motor
6	LUM2	Lower stage lift-up motor	Synchronous motor
7	DCFM	Power fan motor	Fan motor
8	ICUFM	ICU fan motor	Fan motor
9	LSUFM	LSU fan motor	Fan motor
10	PCFM	Process fan motor	Fan motor



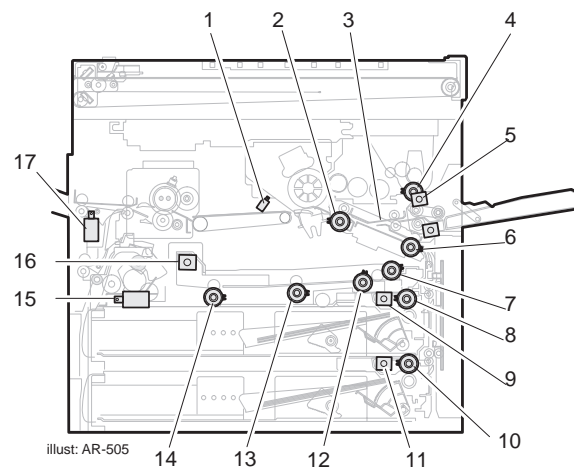
No.	Abbreviation	Name	Type
11	VFM1	Exhaust fan motor 1	Fan motor
12	VFM2	Exhaust fan motor 2	Fan motor
13	VFM4	Exhaust fan motor 4	Fan motor
14	VFM5	Exhaust fan motor 5	Fan motor
15	VFM3	Exhaust fan motor 3	Fan motor
16	VFM6	Exhaust fan motor 6	Fan motor
17	VFM8	Exhaust fan motor 8	Fan motor
18	FSM	Fusing motor	Brushless motor
19	VFM7	Exhaust fan motor 7	Fan motor
20	POM	Paper exit motor	Stepping motor
21	DSBM	Reverse motor	Stepping motor
22	DASM	Alignment motor	Stepping motor

## E. Clutch solenoid



illustr: AR-280

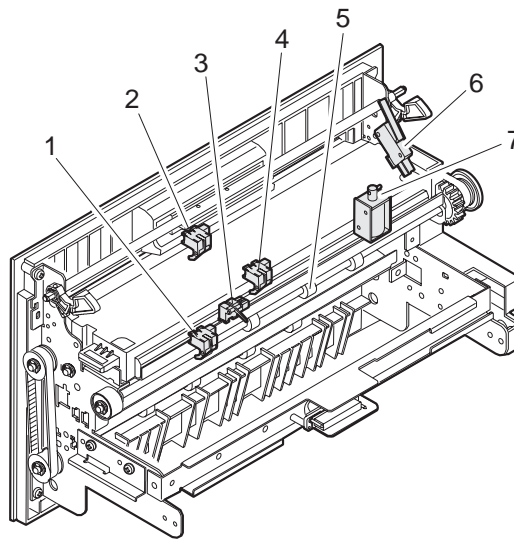
No.	Abbreviation	Function, operation
1	PSPS	Paper separation solenoid
2	RRC	Resist roller clutch
3	MTRC	Transport roller clutch (low)
4	MPFC	Manual paper feed clutch
5	MPFS	Manual paper feed solenoid
6	TRC2	Paper transport clutch
7	TRC1H	Vertical transport roller/paper feed roller high clutch
8	CPFC1	Upper stage cassette paper feed clutch
9	CPFS1	Upper cassette paper feed solenoid



illustr: AR-505

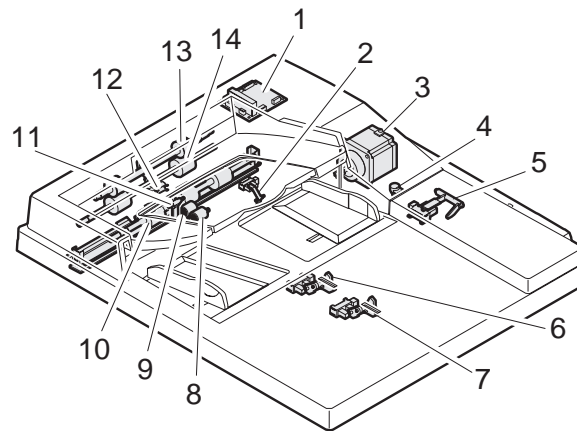
No.	Abbreviation	Function, operation
10	CPFC2	Lower cassette paper feed clutch
11	CPFS2	Lower cassette paper feed solenoid
12	TRC1L	Vertical transport roller/paper feed roller low clutch
13	DTC2	Transport clutch 2
14	DTC1	Transport clutch 1
15	DSBS	Selection of paper exit to the lower stage of the 2-tray paper exit unit and the reverse route
16	DSCS	Selection of paper retaining and transport in paper reversion
17	OGS	Two-stage paper exit tray solenoid

## F. 2-tray paper exit unit



No.	Code	Name	Type	Function and operation
1	POD3	Paper exit detector (Lower stage)	Photo transmission	Detection of paper exit to the lower tray
2	POD2	Paper exit detector (Upper stage)	Photo transmission	Detection of paper exit to the upper tray
3	DSBD	ADU reverse detector	Photo transmission	Detection of reversed paper to the duplex module
4	POD1	Paper exit detector	Photo transmission	Detection of paper exit
5	—	Paper exit roller	—	Paper exit from the tray
6	DSWL		Micro switch	Detection of open and close for paper exit unit
7	DGS	Reverse gate solenoid	Solenoid	Selection of paper exit to the lower tray or to the duplex module

## G. SPF (AR-280/281 only)

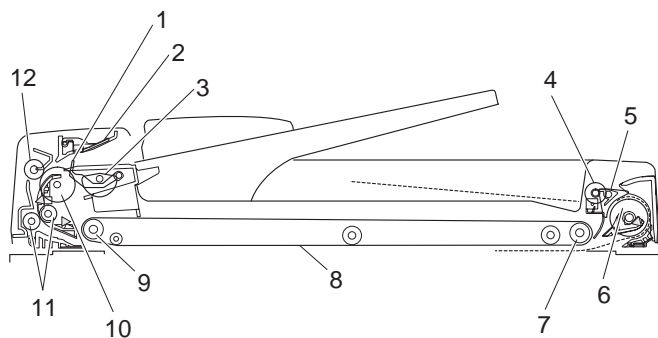


No.	Code	Name	Type	Function and operation
1	—	SPF control PWB	—	—
2	EMPS	Document detector	Photo transmission	Tray document empty detection
3	DTM	Paper feed/transport motor	Stepping motor	Tray document feed/transport/exit roller drive
4	DWVR	Document width sensor	Variable resistor	Tray document width detection
5	OPCLS	Cover open/close detector	Photo transmission	SPF cover open/close detection
6	SIZ2	Document length detector (Small)	Photo transmission	Tray document length detection (for short size)
7	SIZ1	Document length detector (Large)	Photo transmission	Tray document length detection (for long size)
8	—	Document pickup roller	—	—
9	—	Document feed roller	—	—
10	—	Document resist roller	—	—
11	REGS	Resist sensor	Photo transmission	Tray document rear edge detection
12	POS	Document exit sensor	Photo transmission	Tray document exit detection
13	—	Document transport roller	—	—
14	—	Document exit roller	—	—



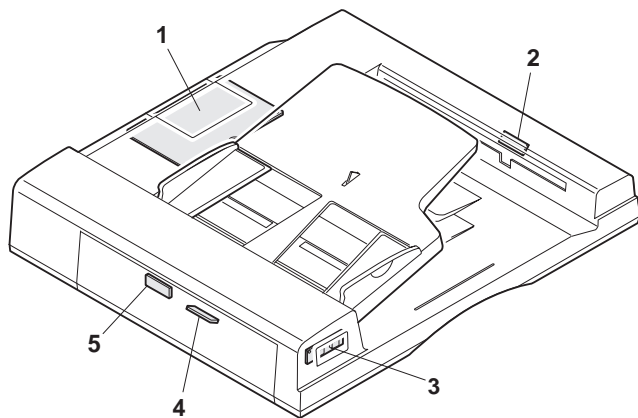
## H. RADF (AR-285/286/335/336/405 only)

### 1) Main parts



No.	Function, operation
1	Original stopper
2	A21 weight plate
3	Semi-circular roller
4	Paper exit roller
5	Flapper
6	Reverse roller
7	Transport belt follower roller
8	Original transport belt
9	Transport belt drive roller
10	Paper feed roller
11	Resist roller
12	Separation roller

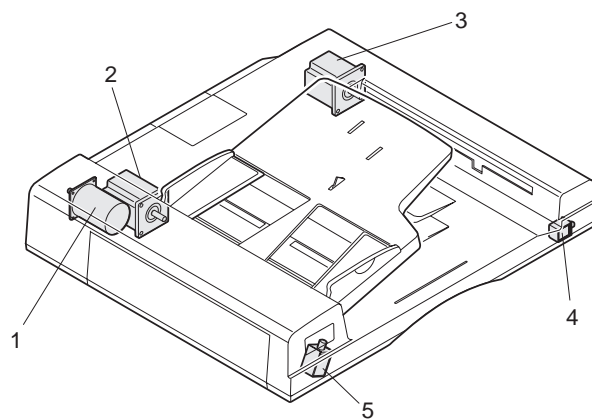
### 2) PWB distribution



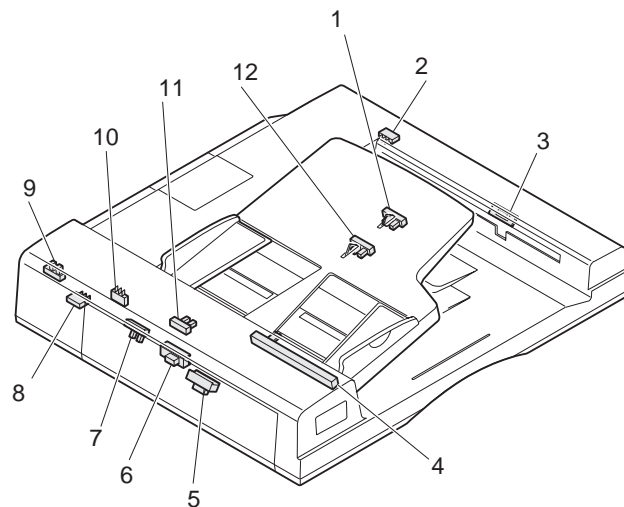
No.	Name	Function, operation
1	Control PWB	RADF unit control, PCU communication
2	Reverse sensor PWB	Document reverse detection
3	LED PWB	Document feed, document remaining display
4	Original timing sensor PWB	Document timing detection
5	Original reverse sensor PWB	Document feed detection

### 3) Motors, solenoids, and clutches

No.	Code	Name	Type
1	DFM	Paper feed motor	DC motor
2	DTM	Transport motor	Stepping motor
3	DRM	Reverse motor	Stepping motor
4	DRSOL	Reverse solenoid	DC solenoid
5	DFSOL	Paper feed solenoid	DC solenoid



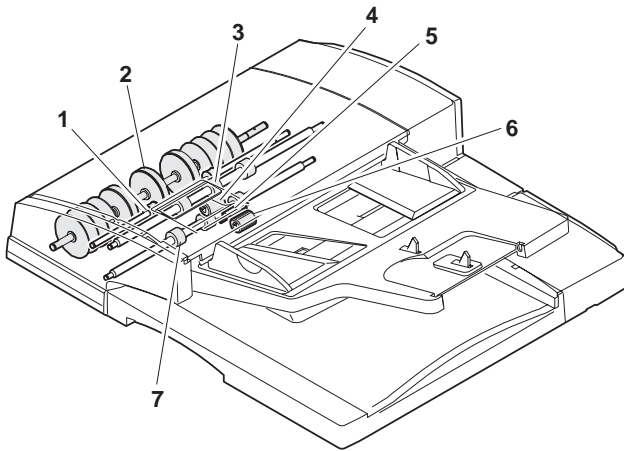
### 4) Sensors, switches, detectors



No.	Code	Functions and operations
1	DLS2	Original length detection on the tray (Inch series only)
2	TGOD	Reverse cover open/close detection
3	RDD	Turns HIGH when the original lead edge is transported to the reverse/paper exit path.
4	DWVR	Original width detection on the tray
5	DTD	Turns HIGH when the original lead edge is transported from the paper feed section to the vicinity of the transport belt.
6	DFD	Turns HIGH when the original lead edge is fed just in front of the resist roller.
7	DWS	Original width detection
8	FGOD	Paper feed cover open/close detection
9	DFMRS	Paper feed motor rotation detection
10	AUOD	ADF unit open/close detection
11	DSS	Original detection on the tray
12	DLS1	Original length detection on the tray

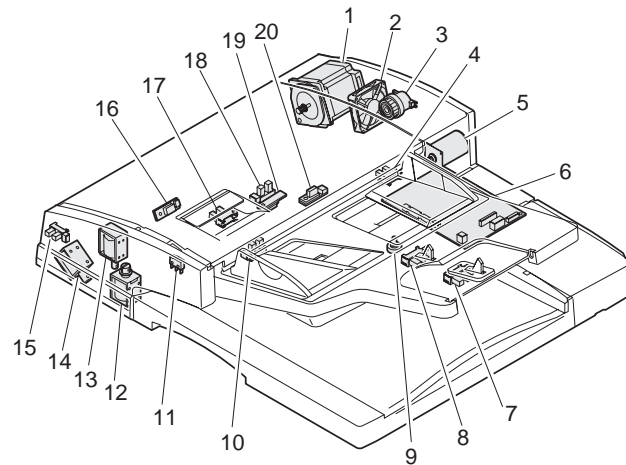
## I. RSPF (AR-501/505 only)

### A. Roller



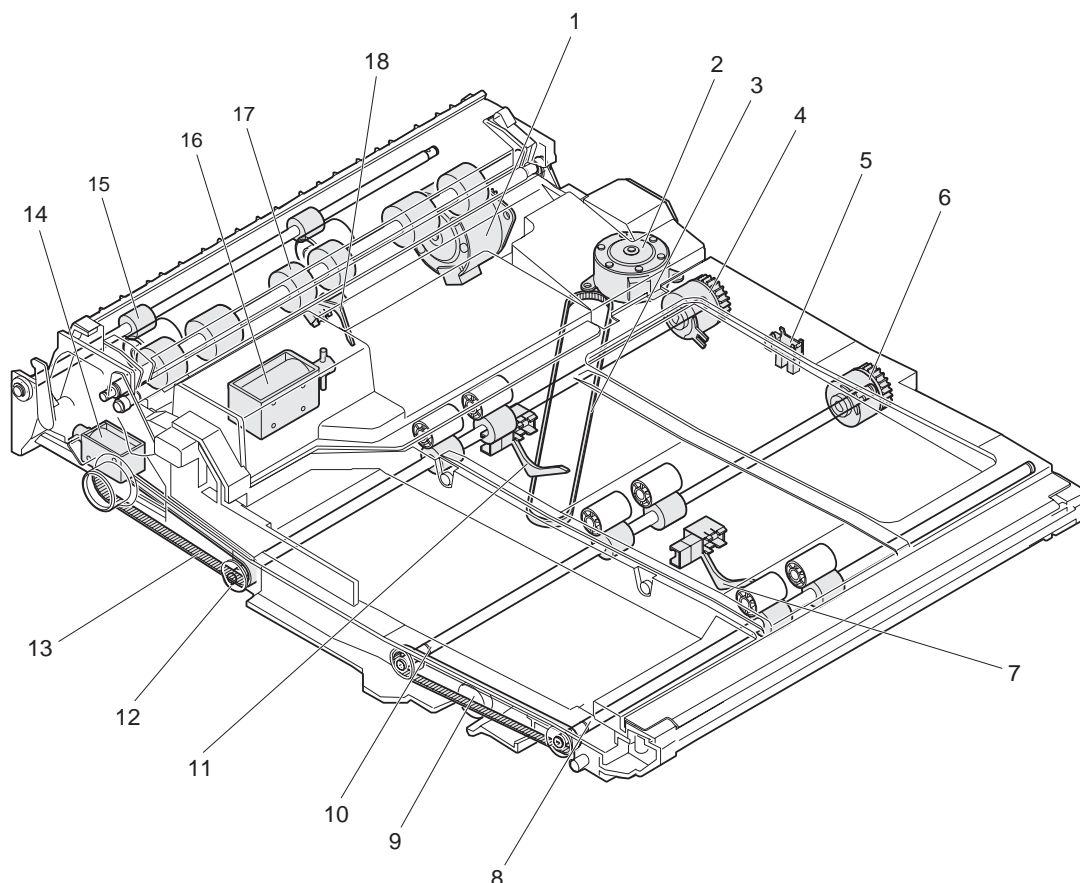
No.	Name
1	Paper exit roller
2	Read roller
3	Resist roller
4	Paper feed roller
5	Separation pad
6	Pickup roller
7	SB roller

### B. Sensor, switch, solenoid, motor



No.	Code	Name	Type	Function and operation
1	FMOT	Transport motor	Stepping motor	Transport and document read motor
2	DCFAN	Fan motor	—	Transport motor cooling fan
3	ACL	Paper feed clutch	—	Document feed clutch
4	MCLKS	DCMCLK	Photo transmission	DC motor encoder sensor
5	AMOT	Paper feed motor	DC motor	Document feed motor
6	PBA-CONTROL	Control PWB	—	RSPF control PWB
7	TRS-L	Tray sensor L	Photo transmission	Document tray longitudinal direction sensor
8	TRS-S	Tray sensor S	Photo transmission	Document tray traverse direction sensor
9	TRVR	Size volume	—	Document tray width direction detection volume
10	EMPS	Empty sensor	Photo transmission	Document sensor set on the document tray
11	JAMOPEN	Jam open switch	—	RSPF jam cover open/close detection
12	SBSOL	Pressure solenoid	—	Reversing path document pressure solenoid
13	FLPSOL2	Flapper solenoid 2	—	Read roller and document exit select solenoid
14	FLPSOL1	Flapper solenoid 1	—	Reversing path and read roller select solenoid
15	DFOPEN	DFOPENF	Photo transmission	RSPF open sensor
16	RDS	Read sensor	Reflection	Document read timing sensor
17	REJI	Resist sensor	Photo transmission	Paper feed resist timing sensor
18	EXITS	Paper exit sensor	Photo transmission	Document exit sensor
19	SBS	SB sensor	Reflection	Reversing path document sensor
20	SPS	Post-separation sensor	Reflection	Feeding document size sensor

## J. ADU (AR-285/335/505 only)



No.	Code	Name	Type	Function and operation
1	—	Reverse motor	Pulse motor	Paper reversion and transport drive
2	—	Alignment motor	Pulse motor	Paper alignment plate drive
3	—	Alignment belt (232MXL)	—	Paper transport
4	DTC1	Transport clutch 1	Electromagnetic clutch	—
5	—	Alignment plate home position detector	Photo transmission	Alignment plate home position detection
6	DTC2	Transport clutch 2	Electromagnetic clutch	—
7	DPPD3	Paper in detector 3	Photo transmission	ADU tray paper in detection
8	—	Transport roller 3	—	ADU tray paper transport
9	—	Transport belt (145MXL)	—	Transport roller drive
10	—	Transport roller 2	—	ADU tray paper transport
11	DPPD2	Paper in detector 2	Photo transmission	ADU tray paper in detection
12	—	Transport roller 1	—	ADU tray paper transport
13	—	Belt B	—	Transport roller drive
14	DSBS	Paper exit/reverse gate solenoid	Solenoid	Selection of paper exit to the lower stage of the 2-tray paper exit unit and the reverse route
15	—	Reverse roller	—	Selection of paper retaining and transport in paper reversion
16	DSCS	Contact/detach solenoid	Solenoid	Selection of paper storing and transport in ADU tray
17	—	Transport roller	—	Paper transport
18	DPPD1	Paper in detector 1	Photo transmission	ADU tray paper in detection

## [6] SETTING AND ADJUSTMENTS

### 1. List of adjustment items

Section	Adjustment item	Adjustment procedure
A. Process	(1) Developing doctor gap adjustment	
	(2) MG roller main pole position adjustment	MG roller main pole position adjustment
	(3) Developing bias voltage adjustment	SIM8-1/44-15
	(4) Main charger grid voltage adjustment	SIM8-2/44-15
	(5) Transfer charger adjustment	SIM8-6
	(6) Separation charger bias voltage adjustment	SIM8-7
	(7) Photoconductor marking sensor sensitivity (gain) adjustment	SIM44-2
	Image density sensor sensitivity (gain) adjustment SIM44-2	SIM44-2
B. Laser scanner (exposure)	(1) Horizontal image distortion adjustment	LSU lever adjustment
	(2) Print off-center adjustment	SIM50-10
	(3) Laser power setting (copier mode)	SIM61-2/44-15 SIM61-4 Printer mode
C. Scanner	(1) Vertical image distortion balance adjustment	Copy lamp unit installing position adjustment
	(2) Vertical image distortion balance adjustment	No. 2/No. 3 mirror base installing position adjustment
	(3) Vertical (sub scanning direction) distortion adjustment [Winding pulley position adjustment]	Winding pulley position adjustment
	(4) Horizontal (main scanning direction) distortion adjustment [Lower rail height adjustment]	F rail height adjustment
	(5) Main scanning direction magnification ratio adjustment	CCD unit position adjustment
	(6) Main scanning direction magnification ratio adjustment	SIM48-1
	Sub scanning direction magnification ratio adjustment * Including the adjustment with SPF, RSPF	SIM48-1
	(7) Copy image position, image loss, void area adjustment	SIM50-1/2
	(8) Original off-center adjustment * Including the adjustment with SPF	SIM50-12
	(9) Original off-center adjustment * Including the adjustment with SPF, RADF, RSPF	SIM50-12

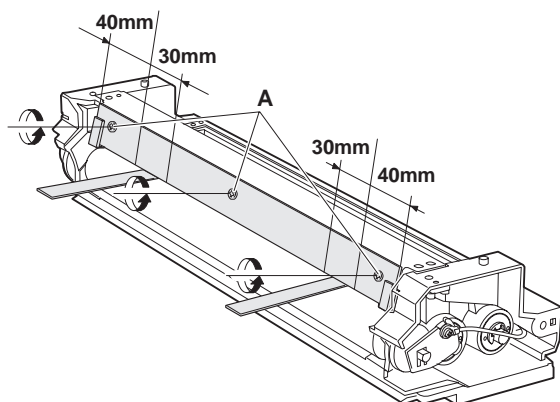
Section	Adjustment item	Adjustment procedure
D. Image density adjustment	(1) Test chart setting	SIM 46-2/9/10/11
E. Paper feed	(1) Manual paper feed size detection level adjustment	SIM40-2
	(2) Paper feed off-center adjustment	
F. Paper transport	(1) Separation pawl operation timing adjustment	SIM51-1
	(2) Paper resist amount adjustment	SIM51-2
G. Others	(1) Original size sensor detection level adjustment	SIM41-2
	(2) Original size sensor detection level adjustment	SIM41-1
	(3) Waste toner full detection level adjustment	
	(4) Touch panel adjustment	SIM65-1
	(5) Key touch sound volume adjustment	Sound volume adjustment
H. SPF	(1) Hinge height check and adjustment	Table glass clearance adjustment
	(2) Open/close sensor position adjustment	SIM 2-02
I. RADF (AR-RF1) (When the RADF is installed)	(1) Document lead edge stop position adjustment	SIM 53-1
	(2) Resist/timing/paper exit sensor adjustment	SIM 53-2
	(3) Test mode with DIP switch	
J. RADF (AR-RF2) (When the RADF is installed)	(1) Document lead edge stop position adjustment	SIM 53-1
	(2) Resist/timing/paper exit sensor adjustment	SIM 53-2
	(3) Test mode with DIP switch	
K. RSPF	Lead edge position adjustment	SIM 50-1/2/6/7
	Magnification ratio adjustment	SIM 48-1
	No. 1 resist quantity adjustment	SIM 51-2
	No. 2 resist quantity adjustment	SIM 51-2
	Image loss adjustment	SIM 50-1/2/6/7
	Center shift adjustment	50-12
	Reflection type sensor adjustment	SIM 53-2
	Image distortion adjustment	Distortion screw adjustment
	Back surface resist adjustment	SB resist plate adjustment
	Skew adjustment	Upper/lower guide adjustment

## 2. Copier adjustment

### A. Process section

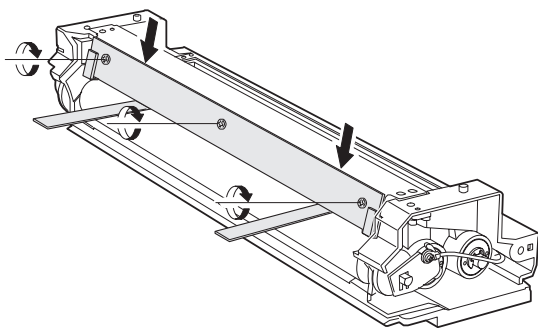
#### (1) Developing doctor gap adjustment

- 1) Remove the screw and the connector which connect the toner hopper and the developing unit, and separate them.
- 2) Loosen the DV doctor fixing screw A.
- 3) Insert a 0.53mm (0.6mm for AR-280/285/335) thickness gauge into the clearance of 40mm ~ 70mm from the DV doctor edge.



- 4) Press the DV doctor in the arrow direction and tighten the DV doctor fixing screw. (Perform the same procedure for the front and the rear frame.)
- 5) Check that the clearance (2 positions) at 40mm ~ 70mm from the both ends is  $0.53 \pm 0.03\text{mm}$  ( $0.6 \pm 0.03\text{mm}$  for AR-280/285/335).

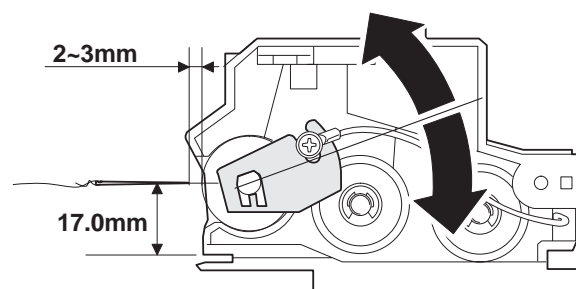
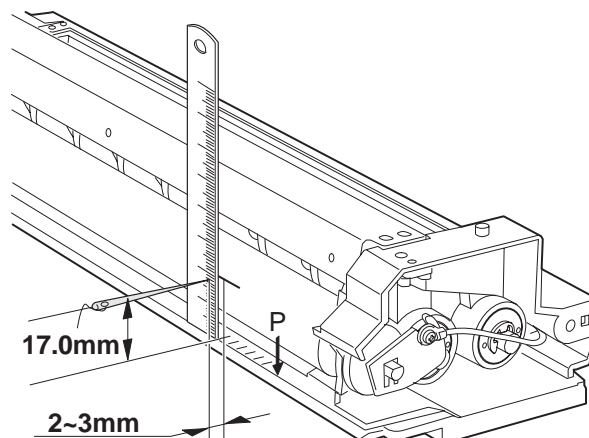
\* When inserting a thickness gauge, be careful not to scratch the DV doctor and the MG roller.



#### (2) MG roller main pole position adjustment

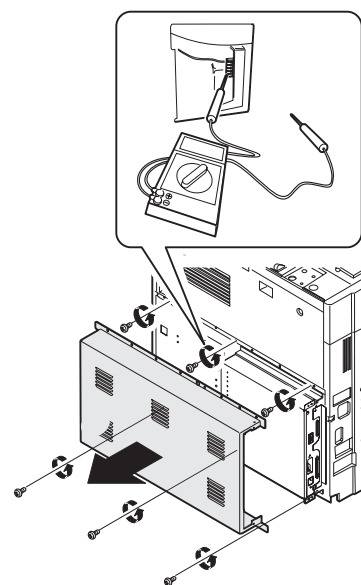
- 1) Remove the screw and the connector which connect the toner hopper and the developing unit, and separate them. Put the developing unit on a flat floor.
- 2) Tie a needle or pin on a string.
- 3) Hold the string and put the needle horizontally and move it toward the MG roller. (Do not use a clip which is too big to have a correct position since the MG roller diameter is small.)
- 4) With the needle tip at 2 ~ 3 mm apart from the MG roller surface, mark the point on the surface which is on the extended line of the needle tip.
- 5) Measure the distance between the marking position and surface P of the developing unit and check that it is 17mm.

If the distance is not as specified above, loosen the fixing screw of the main pole adjustment plate, and move the adjustment plate to adjust.

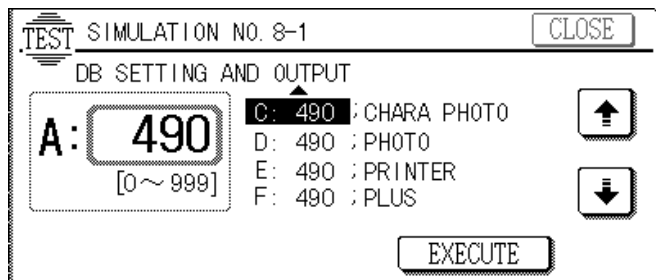
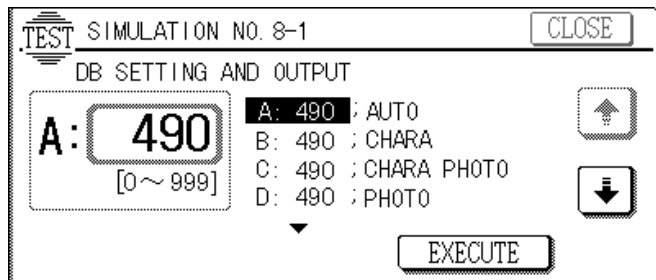


#### (3) Developing bias voltage adjustment

- 1) Set the digital multi-meter range to the DCV range.
- 2) Put the test probes between the DV bias output check pin (CN2-1 pin) of the high voltage unit and the chassis (GND).



## 3) Execute SIM 8-1.



The DV bias can be measured without installing the OPC drum and the developing unit.

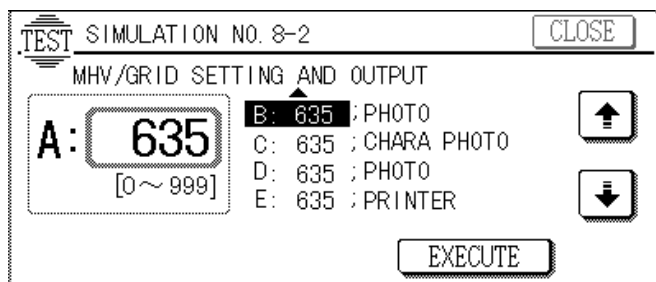
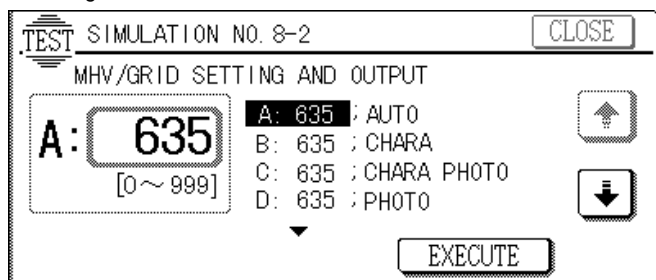
## 4) When the output voltage is within the adjustment range, change the displayed value and adjust. (1 step: about 1 V)

	Adjustment range	
	AR-501/505	Others
Developing negative bias voltage (Auto)	-425 $\pm$ 5V	-500 $\pm$ 5V
Developing negative bias voltage (Character)	-500 $\pm$ 5V	-500 $\pm$ 5V
Developing negative bias voltage (Character, Photo)	-500 $\pm$ 5V	-500 $\pm$ 5V
Developing negative bias voltage (Photo)	-500 $\pm$ 5V	-500 $\pm$ 5V
Developing bias (Printer)	-500 $\pm$ 5V	-500 $\pm$ 5V
Developing positive bias voltage	+150 $\pm$ 5V	+150 $\pm$ 5V

(The value and the output voltage may not coincide.)

**(4) Main charger grid voltage adjustment**

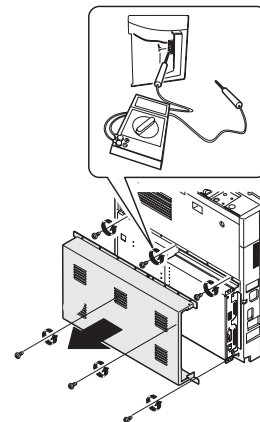
- 1) Install the DV unit, the drum holder unit, and the charger units to the copier.
- 2) Turn on the main switch, and execute SIM 8-2 to check the grid voltage set value.



(Measurement at the high voltage PWB check point)

## 3) Remove the rear cabinet.

- 4) Connect the digital multi-meter to the grid voltage output check pin (CN2-5 pin).
- 5) Set the digital multi-meter range to the DCV range. (Use a digital multi-meter which allows measurement up to DC1000 V.)
- 6) Manually turn on the door switch.
- 7) Turn on the main switch, and execute SIM 8-2 to check.



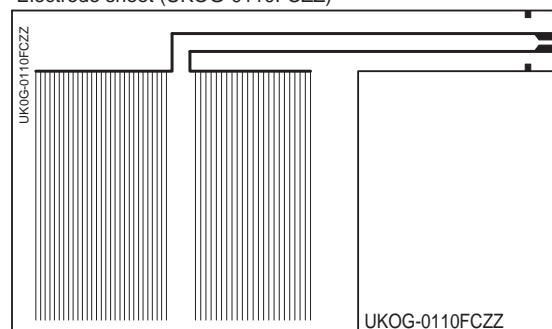
## 8) If the output voltage is not in the specified range, change the displayed value and adjust. (1 step: about 1V)

	Adjustment range		
	AR-280/ 285/ 335	AR-250/281/ 286/336/405	AR-501/505
Grid voltage (Auto)	-642 $\pm$ 5V	-602 $\pm$ 5V	-570 $\pm$ 5V
Grid voltage (Character)	-642 $\pm$ 5V	-602 $\pm$ 5V	-645 $\pm$ 5V
Grid voltage (Character, Photo)	-642 $\pm$ 5V	-602 $\pm$ 5V	-645 $\pm$ 5V
Grid voltage (Photo)	-642 $\pm$ 5V	-602 $\pm$ 5V	-645 $\pm$ 5V
Grid voltage (Printer)	-642 $\pm$ 5V	-602 $\pm$ 5V	-645 $\pm$ 5V
Grid voltage (FAX)	-642 $\pm$ 5V	-602 $\pm$ 5V	-645 $\pm$ 5V

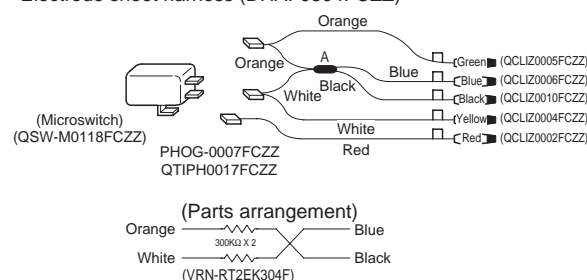
(The value and the output may not coincide.)

**(5) Transfer charger current adjustment****a. Special measurement tool**

Electrode sheet (UKOG-0110FCZZ)



Electrode sheet harness (DHAI-0304FCZZ)

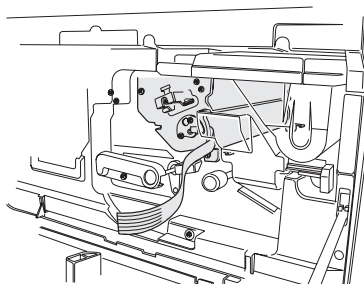
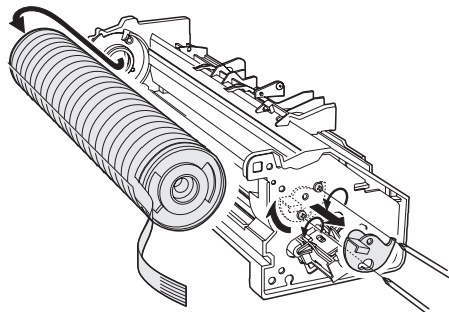




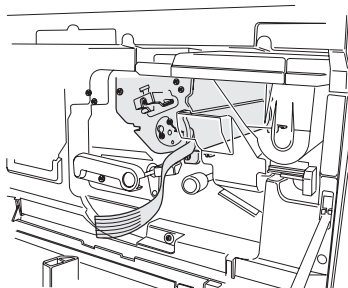
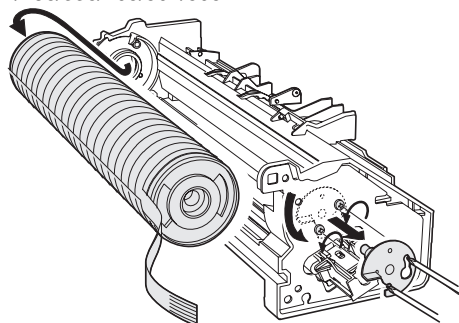
## b. Adjustment procedure

- 1) Remove the developing unit, the transfer/separation charger unit, and the main charger unit from the copier.
- 2) Remove the process unit from the copier.
- 3) Remove the OPC drum from the process unit, and install the electrode sheet by using a rubber band, tape, etc.
- 4) Install the OPC drum with the electrode sheet installed to the process unit, and install the process unit to the copier.
- 5) Install the drum holder unit to the copier so that the electrode sheet lead wire can be taken out from the developing unit side.

AR-280/285/335



AR-250/281/286/336/405/501/505



- 6) Clean the transfer charger wire separation lamp and install the transfer/separation charger unit to the copier.

If necessary, wipe the lamp which can be seen from the square hole of the TC guide rail with waste cloth.

(Do not install the main charger unit.)

- 7) Connect the electrode sheet and the digital multi-meter (or an ammeter). Manually turn on the door switch.

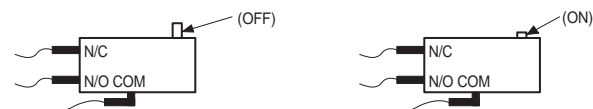
- 8) Check the drum current on the front frame side and the rear frame side.

The current on the front and the rear frame sides: within 6.0uA

- Turn on the main switch, and execute SIM 8-6.

(THVG will be turned ON for about 30 sec.)

- Measure the drum current on the front frame side and the rear frame side.
  - When the microswitch is OFF, the drum current on the front frame side is displayed.
  - When the microswitch is ON, the drum current on the rear frame side is displayed.



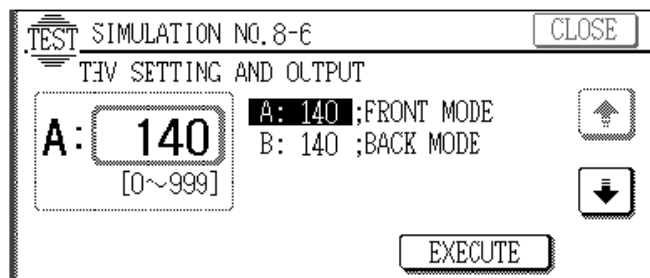
- Check that the current on the front and the rear frame side is 6.0uA or less.

If the current is greater than 6.0uA, replace the charger unit with new one.

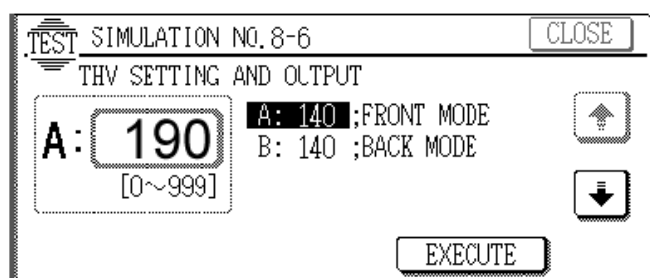
- 9) Adjust THVG output current.

- Turn on the main switch and execute SIM 8-6.

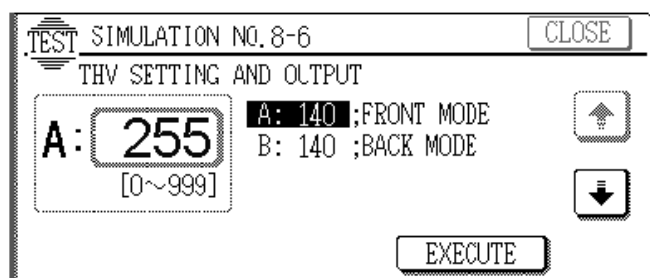
AR-280/285/335



AR-250/281/286/336/405



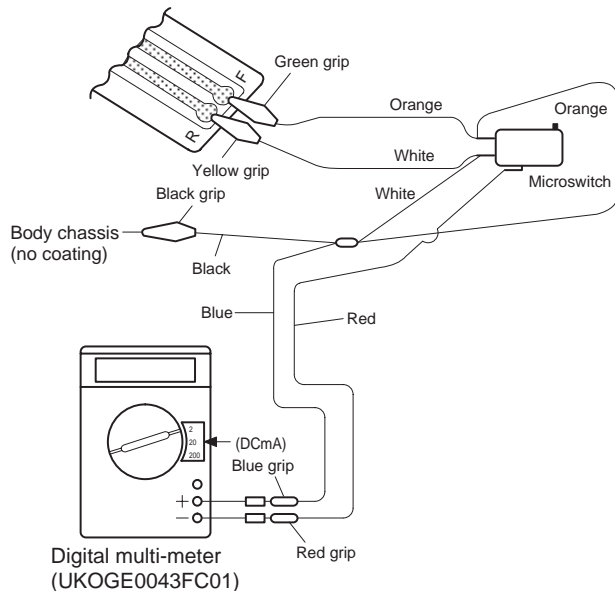
AR-501/505



(THVG will be turned on for about 30 sec.)

- If the output current is not in the specified range, change the displayed value and adjust. (1 step: about 0.1  $\mu$ A)

Transfer charger current	Adjustment spec		
	AR-250/280/ 281/285/286/ 335/336	AR-405	AR-501/505
TC drum current (Front surface mode)	+13.5+1.5 $\mu$ A	+15.0+1.5 $\mu$ A	+18.0+1.5 $\mu$ A
TC drum current (Back surface mode)	+13.5+1.5 $\mu$ A	+15.0+1.5 $\mu$ A	+18.0+1.5 $\mu$ A



- \* Check that the black clip is securely grounded to the machine chassis.

When UKOGE0043CS01 is used:

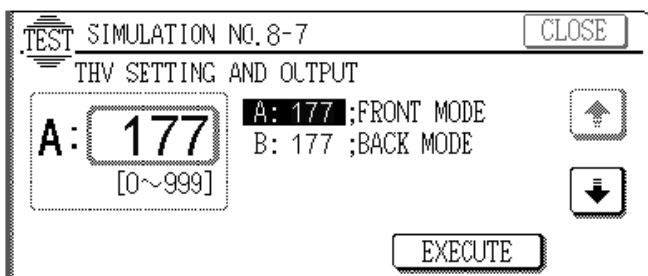
- Knob 1: Set to DCmA.
- Knob 1: Connect to 2.
- Red clip: Connect to (+).
- Blue clip: Connect to (-).

When an ammeter is used:

- Red clip: Connect to (+) of the ammeter.
- Blue clip: Connect to (-) of the ammeter.

#### (6) Separation charger DC component voltage

- 1) Install the DV unit, the drum holder unit, and the charger units to the copier.
- 2) Remove the rear cabinet.
- 3) Connect the digital multi-meter to SHVG output check pin (CN2-3 pin).
- 4) Set the digital multi-meter range to the DCV range.
- 5) Manually turn on the door switch.
- 6) Execute SIM 8-7. (SHVG will be turned on for about 30 sec.)



- 7) If the output voltage is not in the specified range, change the displayed value and adjust. (1 step: about 1V)

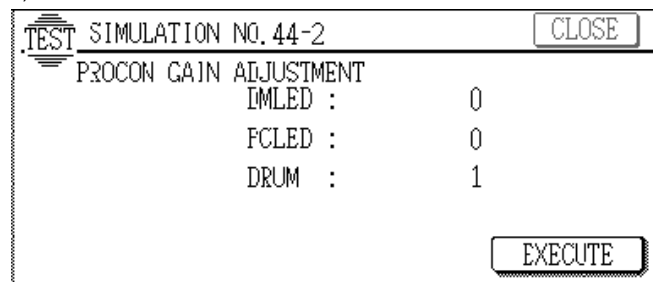
	Adjustment range		
	AR-250/280/ 281/285/286/ 335/336	AR-405	AR-501/505
Separation DC component voltage (Front surface mode)	-140 $\pm$ 10V	-150 $\pm$ 10V	-200 $\pm$ 10V
Separation DC component voltage (Back surface mode)	-140 $\pm$ 10V	-150 $\pm$ 10V	-200 $\pm$ 10V

#### (7) OPC drum marking sensor/Image density sensor gain adjustment

This adjustment must be performed in the following cases:

- When both sensors are cleaned in maintenance.
- When the value of DMLED/PCLED in SIM 44-12 are greater than about 100.  
Clean both sensors and perform the adjustment.

- 1) Execute SIM 44-2.



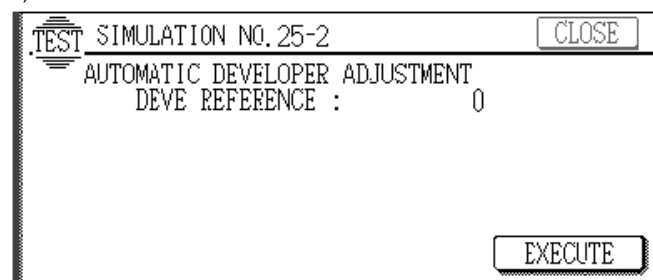
- 2) When the adjustment is completed, the gain value is displayed. If an error occurs during the adjustment, the error display is made.

#### (8) Toner density adjustment (Auto developer adjustment)

This adjustment must be performed in the following case:

- When new developer is supplied.

- 1) Execute SIM 25-2.



- 2) The adjustment is automatically made with the toner density sensor output value displayed. After 3 minutes from starting stirring, the toner density sensor is sampled 16 times, and the average value is stored as the toner density adjustment value.

- \* When new developer is supplied, clear the developer counter with SIM 24-5.



## B. Laser scanner section

### (1) Horizontal image distortion adjustment

- 1) Execute SIM 64-1, and print the pattern of SQUARE from the manual feed tray.

(A: 22 E: 1)

TEST SIMULATION NO. 64-1 CLOSE

SELF PRINT

A: 29 [1~29] A: 29 ;PRINT PATTERN  
B: 255 ;DENSITY  
C: 1 ;MULTI COUNT  
D: 1 ;EXPOSURE

EXECUTE

TEST SIMULATION NO. 64-1 CLOSE

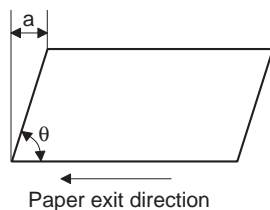
SELF PRINT

F: 1 [1~2] C: 1 ;MULTI COUNT  
D: 1 ;EXPOSURE  
E: 1 ;PAPER SELECT  
F: 1 ;DUPLEX

EXECUTE

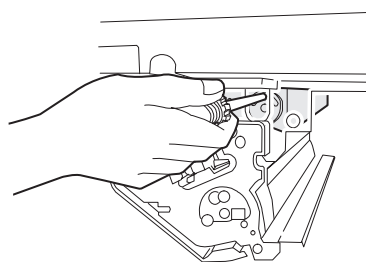
- Set items
- A: Self print pattern
  - B: Density level
  - C: Setting of the number of self print sheets
  - D: Density mode
    - 1 Auto                      3 Text/Photo
    - 2 Text                      4 Photo
  - E: Cassette selection
    - 1 Manual feed              5 Desk middle cassette
    - 2 Upper cassette          6 Desk lower cassette
    - 3 Lower cassette          7 LCC
    - 4 Desk upper cassette
  - F: Duplex print selection
    - 1 Simplex                  2 Duplex

- 2) Obtain value a of the printed sheet.

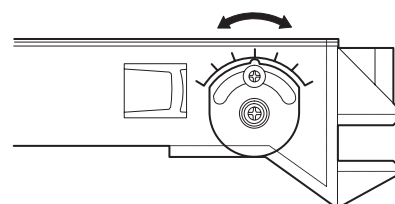
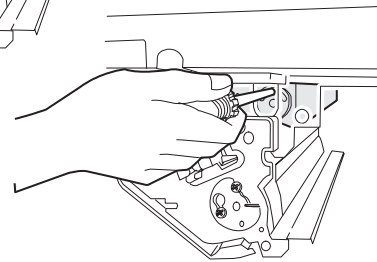


- 3) Turn the adjustment handle to adjust according to the value a.

AR-280/285/335



AR-250/281/286/336/  
405/501/505



Adjustment handle: 1 scale = 0.5mm (dimension a)  
 q<90 degrees: Right direction  
 q>90 degrees: Left direction  
 Adjustment specification: a = 0 mm,  $\theta = 90$  degrees

### (2) Print off-center adjustment

- 1) Execute SIM 64-1. print one sheet from each paper feed port.

Measure the void amount both sides.

When making duplex copy with OC, press the [CLOSE] key to enter the copy menu and read two pages of documents. Then press the [READ CORRECT] key.

\* Select the self print pattern which allows easy measurement of the void amount.

- 2) Execute SIM 50-10.

TEST SIMULATION NO. 50-10 CLOSE

PRINT OFF-CENTER ADJUSTMENT

A: 50 [0~99] A: 50 ;Manual  
B: 50 ;1CS  
C: 50 ;2CS  
D: 50 ;ADU  
E: 50 ;DESK 1CS

OK

TEST SIMULATION NO. 50-10 CLOSE

PRINT OFF-CENTER ADJUSTMENT

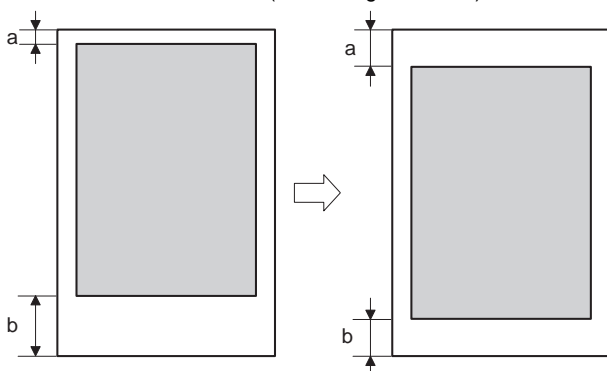
H: 50 [0~99] D: 50 ;ADU  
E: 50 ;DESK 1CS  
F: 50 ;DESK 2CS  
G: 50 ;DESK 3CS  
H: 50 ;LCC

OK

- 3) Change each value to adjust so that the void amounts of both sides are even.

a > b: Increase the value.

a < b: Decrease the value. (See the figure below.)



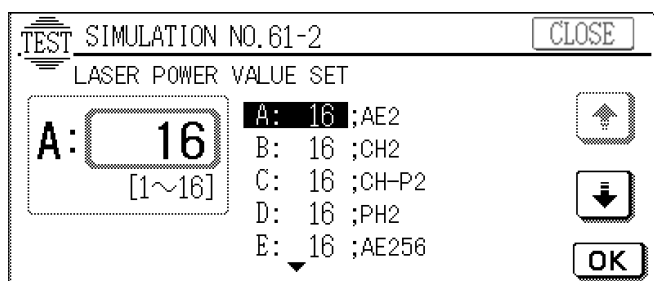
- 4) Press the CA key to terminate the simulation.

### (3) Laser power setting

\* Normally the laser power is automatically corrected by process control. Use the image density adjustment described later unless there is a special request from the user.

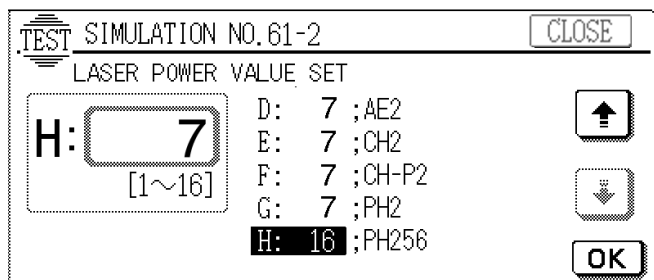
#### (AR-280/285/335)

All must be set to "16".



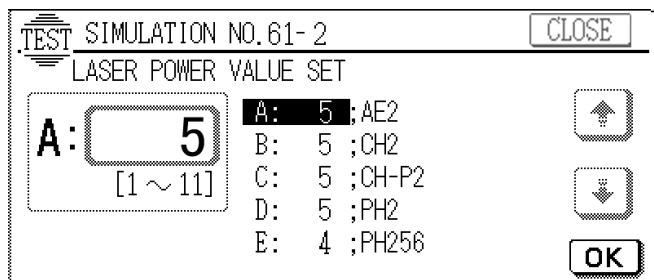
#### (AR-250/281/286/336)

All must be set to "7".



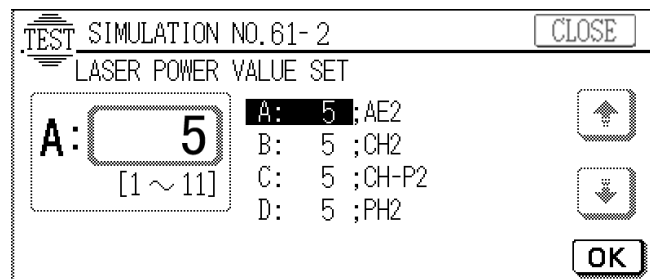
#### (AR-405)

Set all to "5" except for PH256.



#### (AR-501/505)

All must be set to "5".



## C. Scanner section

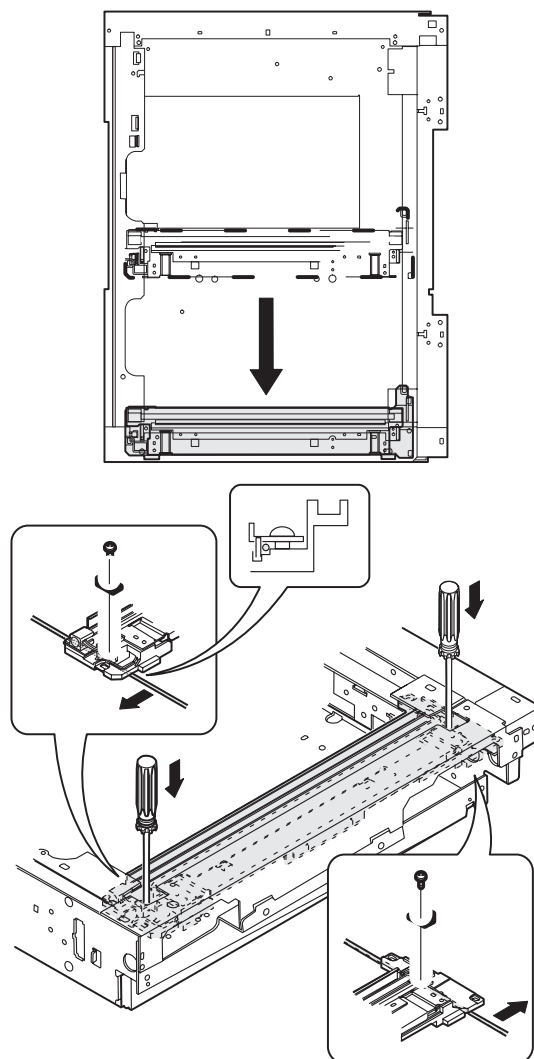
### (1) Vertical image distortion balance adjustment (Copy lamp unit installing position adjustment)

- 1) Insert the front/rear mirror base drive wire into the frame groove and press and fix it with the wire fixing plate. At that time, do not tighten the wire fixing screw.

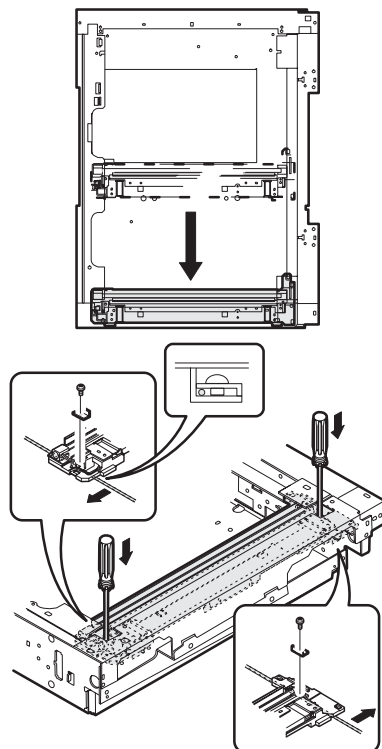
Change the direction of the lamp positioning plate. (F and R)

- 2) Push the copy lamp unit onto the positioning plate, and tighten the wire fixing screw.

#### AR-280/285/335



## AR-250/281/286/336/405/501/505



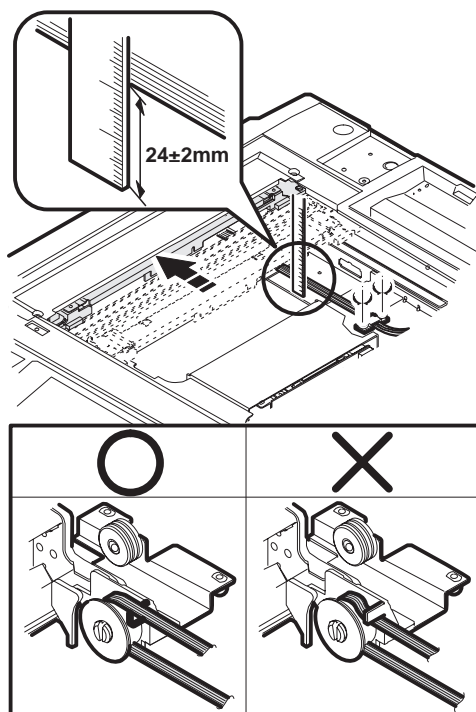
## \* Note for assembling the copy lamp unit

Move the copy lamp unit to the paper exit side, and fix the copy lamp unit with the harness guide so that the distance between the copy lamp harness and the lower frame is about  $24 \pm 2\text{mm}$ , (25 ~ 30mm) with the copy lamp harness extended.

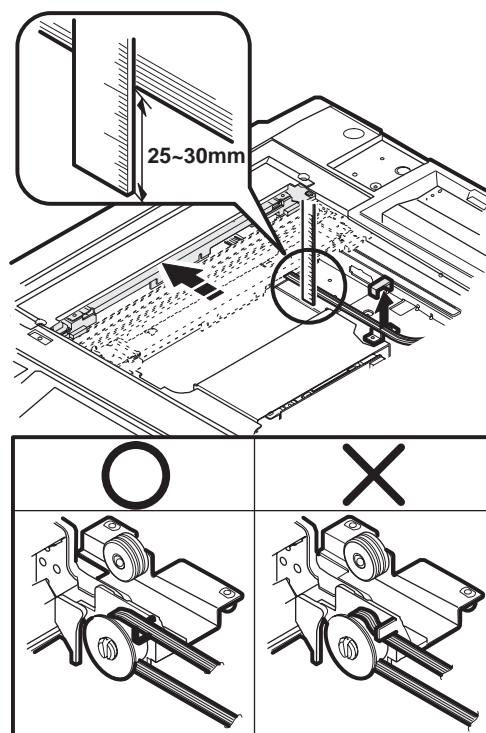
After fixing, manually shift the copy lamp unit a few times to check that it moves smoothly.

If the copy lamp harness is loosely fixed, the copy lamp unit may jump up when reading, resulting in abnormal reading.

## AR-280/285/335



## AR-250/281/286/336/405/501/505

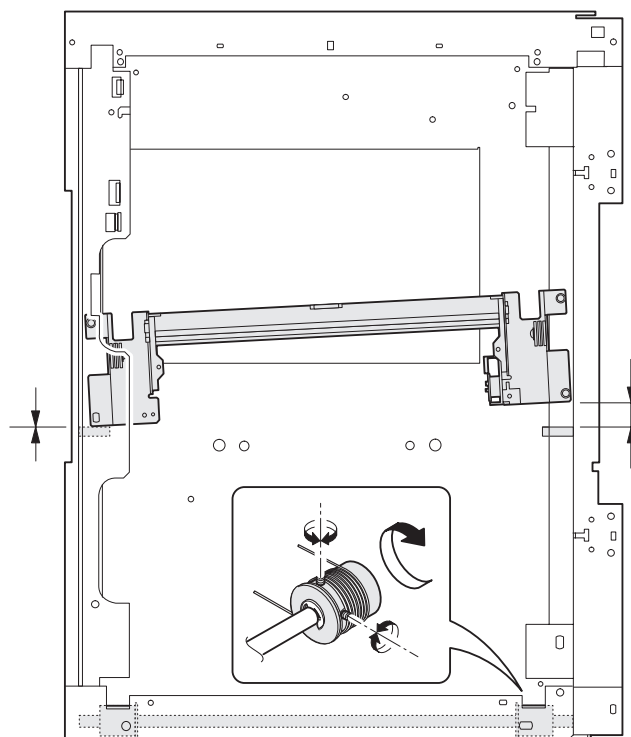


## (2) Vertical image distortion balance adjustment (No. 2/3 mirror base unit installing position adjustment)

This adjustment is to adjust the parallelism of the mirror base to the OPC drum surface and the original surface.

- 1) Manually turn the mirror base drive pulley to bring mirror base B into contact with mirror base positioning plate.

If, at that time, the front frame side and the frame side of mirror base B are brought into contact with the mirror base positioning plate simultaneously, the parallelism is correct and there is no need for adjustment.

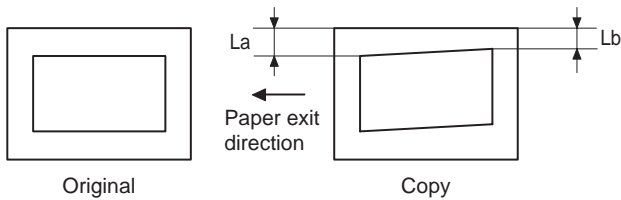


Illust: AR-280

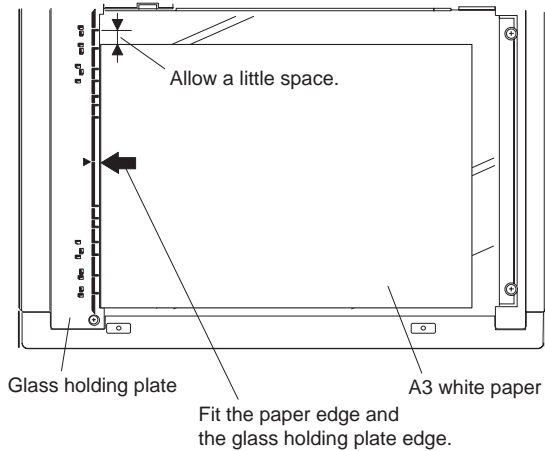
### (3) Vertical (sub scanning direction) distortion adjustment [Winding pulley position adjustment]

This adjustment is executed in the following cases:

- When the mirror base drive wire is replaced.
- When the lamp unit, or No. 2/3 mirror holder is replaced.
- When a copy shown below is made.

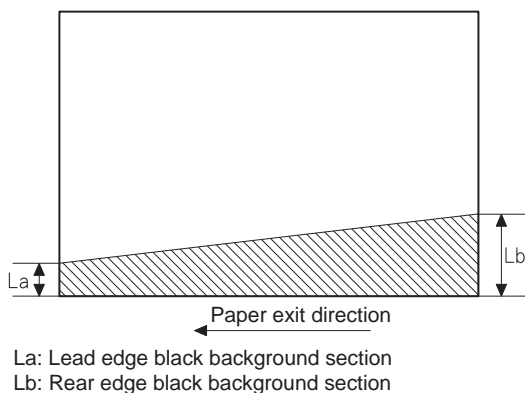


- 1) Set A3 white paper on the original table as shown below.



illustr: AR-280

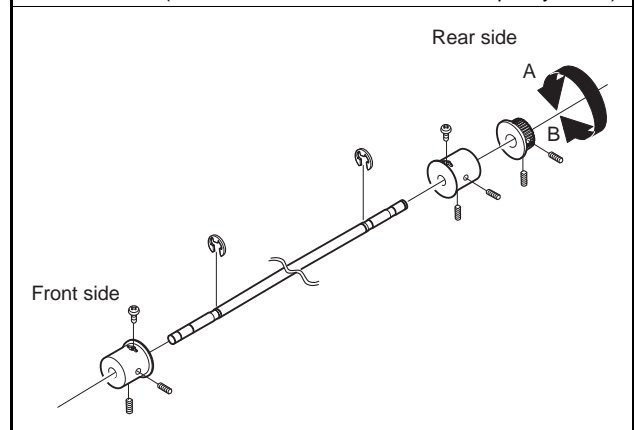
- 2) With the original cover open, make a normal (X 1.0) copy.
- 3) Measure the black distance at the lead edge and the rear edge of the copy paper.



If  $La = Lb$ , the procedures 4) through 7) are not required.

- 4) Loosen the fixing screw of the front or the rear frame mirror base drive pulley.

- If  $La < Lb$ , turn the rear frame mirror base drive pulley in direction B. (Do not move the mirror base drive pulley shaft.)
- If  $La > Lb$ , turn the rear frame mirror base drive pulley in direction A. (Do not move the mirror base drive pulley shaft.)



- 5) Tighten the fixing screw of the mirror base drive pulley.
- 6) Perform procedures 1) through 3).
- 7) If  $La$  is not equal to  $Lb$ , perform procedures 4) and 5).

If  $La = Lb$ , the adjustment is completed.

Repeat procedures 1) through 6) until  $La = Lb$ .

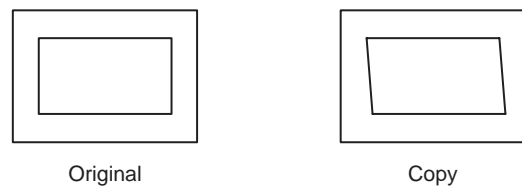
### (4) Horizontal (main scanning direction) distortion adjustment [Lower rail height adjustment]

When there is no distortion in the direction of mirror base scanning and there is sub scanning direction distortion, it can be adjusted by changing the No. 2/3 mirror base unit rail height.

- Before this adjustment, perform the horizontal image distortion adjustment in the laser scanner section.

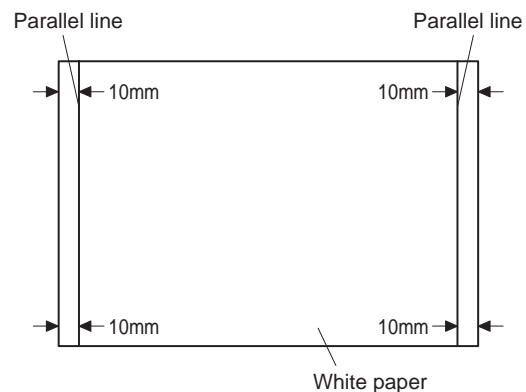
This adjustment must be performed in the following cases:

- When the mirror base wire is replaced.
- When the copy lamp unit and no. 2/3 mirror unit are replaced.
- When the mirror unit rail is replaced and moved.
- When a copy shown below is made.



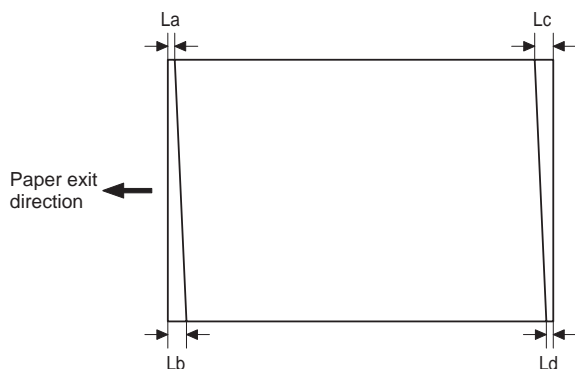
- 1) Make an original for the adjustment.

Draw parallel lines at 10mm from both sides of an A3 white paper.



illustr: AR-280

- 2) Make a copy of the adjustment original on an A3 white paper at the normal magnification ratio.  
(Fit the paper edge and the glass holding plate edge.)
- 3) Measure the distances between the lines and the corners (4 positions of La, Lb, Lc, Ld).



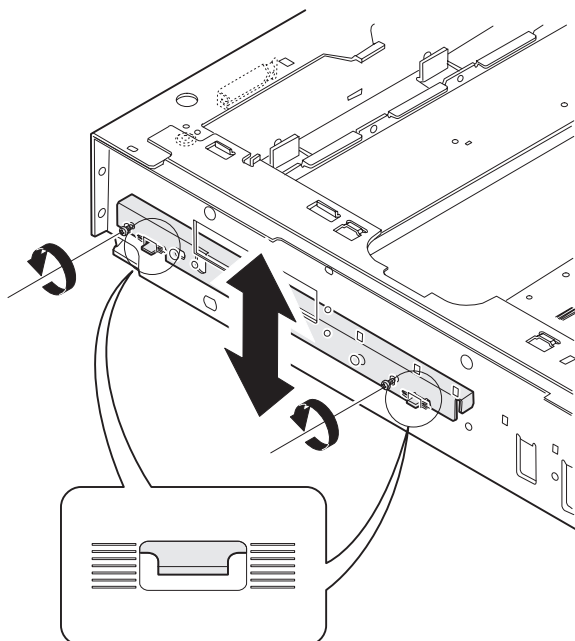
When  $L_a = L_b$  and  $L_c = L_d$ , no need to adjust.

When  $L_a = L_b = L_c = L_d$ , there is no need for adjustment.

- 4) Move the mirror base B rail position up and down (in the arrow direction) to adjust.

- When  $L_a > L_b$ , move the mirror base B rail on the paper exit side upward by the half of the difference of  $L_a - L_b$ .
- When  $L_a < L_b$ , move the mirror base B rail on the paper exit side downward by the half of the difference of  $L_b - L_a$ .  
Example: When  $L_a = 12\text{mm}$  and  $L_b = 9\text{mm}$ , move the mirror base B rail on the paper exit side 1.5mm upward.
- When  $L_c > L_d$ , move the mirror base B on the paper feed side downward.
- When  $L_c < L_d$ , move the mirror base B on the paper feed side upward.
- \* When moving the mirror base rail, hold the mirror base rail handle.

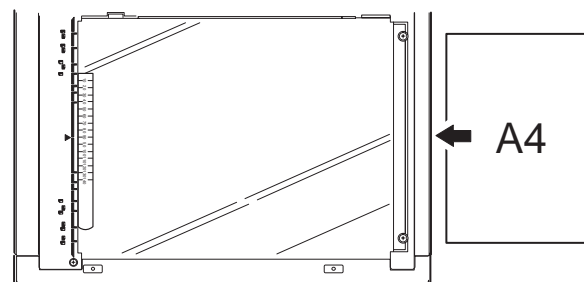
- 5) Adjust so that  $L_a = L_b$  and  $L_c = L_d$ .
- 6) After completion of the adjustment, manually turn the mirror base drive pulley to make full scanning of mirror base A and mirror base B and check that they do not make contact.  
\* If the mirror base rail is moved extremely, the mirror base may be brought into contact. Be careful of that.



illust: AR-280

## (5) Main scanning direction magnification ratio adjustment (CCD unit installing position adjustment)

- 1) Execute SIM 48-1.
- 2) Set each value to 50 (initial value).
- 3) As shown in the figure below, put a scale on the original table.



illust: AR-280

- 4) make a normal copy on A4 paper.
- 5) Compare the scale image length and the actual scale length.
- 6) Obtain the main scanning direction copy magnification ratio according to the following formula.

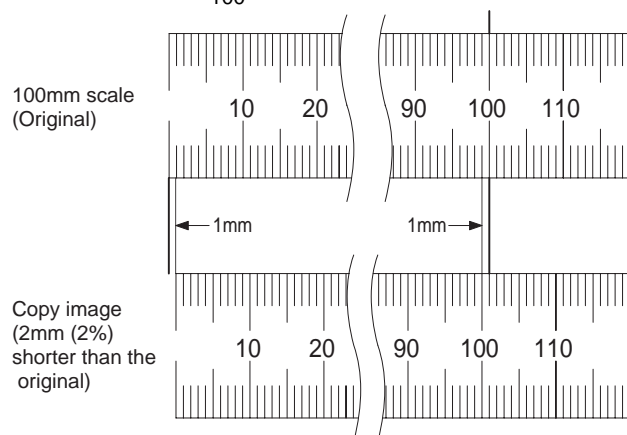
Main scanning direction copy magnification ratio

$$= \frac{(\text{Original length} - \text{Copy length})}{\text{Original length}} \times 100\%$$

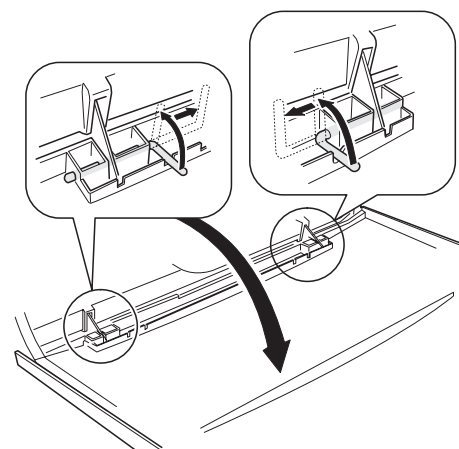
(Example) Put the scale so that 50mm of the scale is at the center of the original.

Main scanning direction copy magnification ratio

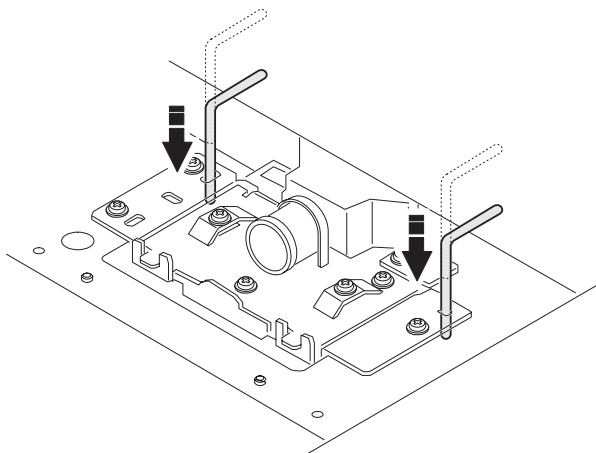
$$= \frac{100 - 98}{100} \times 100 = 2$$



- 7) Remove the original guide L and R, and remove the table glass.
- 8) Remove the dark box cover.
- 9) Remove the slide pin of the front cover unit.

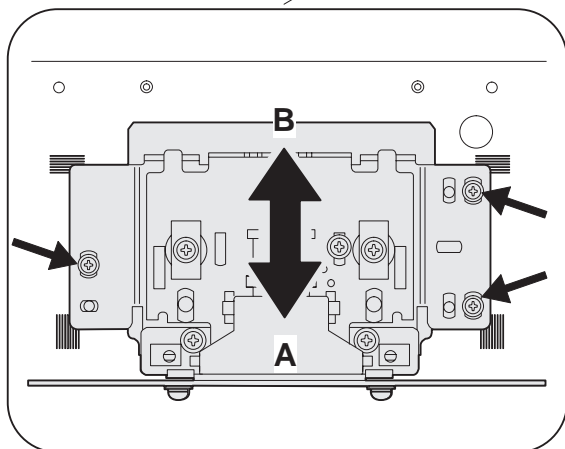
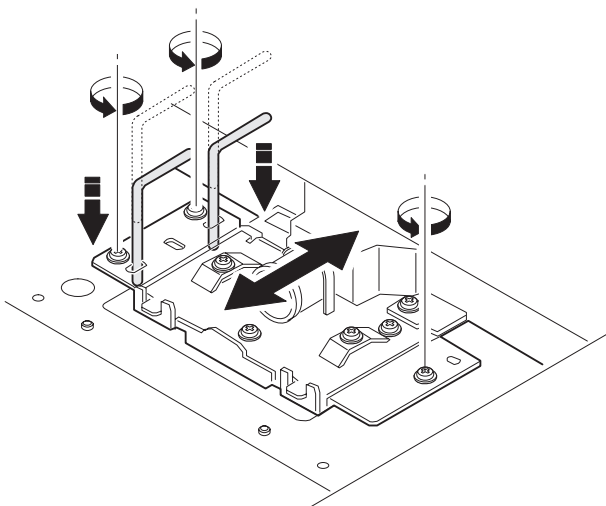


- 10) Insert the slide pin as shown below and make positioning in the vertical direction.



- 11) Insert the slide pin as shown below and make positioning in the horizontal direction.

(Initial position positioning is completed.)



Never loosen a screw other than these ones.

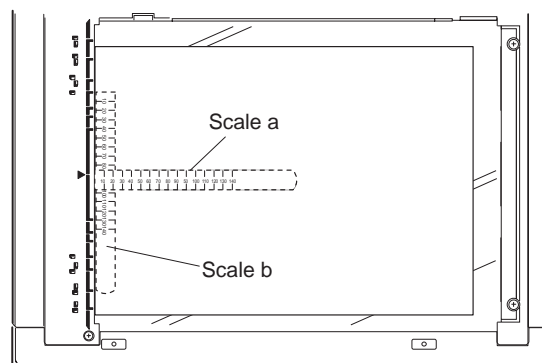
- \* Never loosen the screws which are not indicated in the figure.  
If loosened, the adjustment cannot be made and the unit must be replaced.

- 12) Make a sample copy in the initial position and measure the magnification ratio again.  
13) Change the installing position in the horizontal direction to adjust the magnification ratio.

- When the copy image is longer than the original, move in the direction of B.
- When the copy image is shorter than the original, move in the direction of A.
- One scale of scribe line corresponds to 0.2%.
- For fine errors which cannot be adjusted with this adjustment, use the next simulation SIM 48-1.

#### (6) Main/sub scanning direction magnification ratio adjustment

- 1) Before this adjustment, perform the previous adjustment of CCD unit installation position.
- 2) Place a scale on the original table as shown. (Scale a and scale b may be placed together or individually.)
  - After warming up, the ready lamp lights up.
  - The current set value is displayed simultaneously. (0 ~ 20)

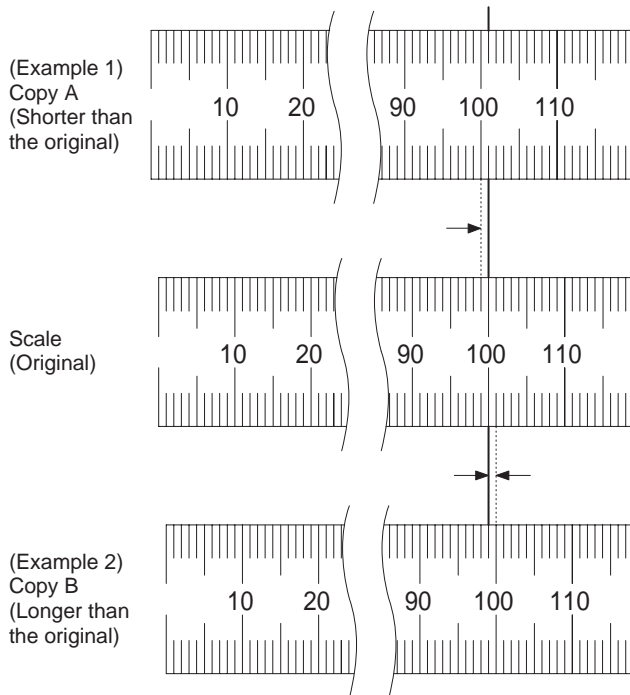


illustr: AR-280

- 3) Make a normal copy and obtain the main/sub scanning direction magnification ratios.

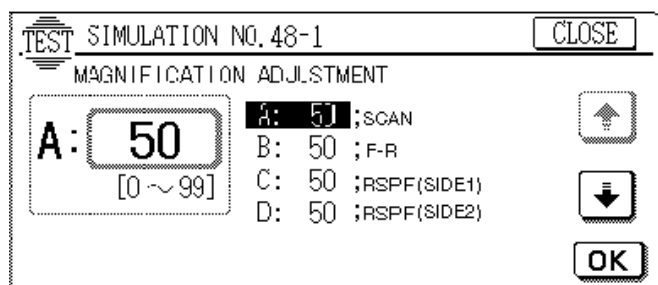
Copy magnification ratio (MRCP)

$$= \frac{(\text{Original dimension} - \text{Copy dimension})}{\text{Original dimension}} \times 100\%$$

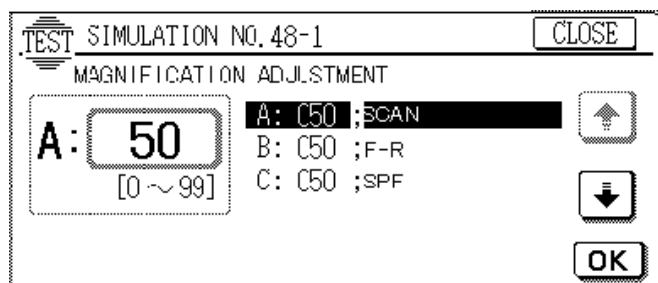


4) Execute SIM 48-1.

(AR-501/505)

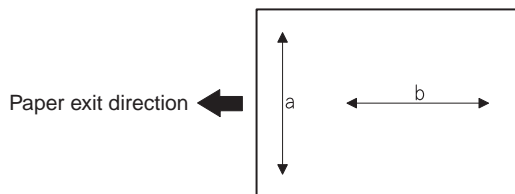


(Other models)



- 5) Change value A so that the magnification ratio in the sub scanning direction is within the specified range.
- 6) Change value B so that the magnification ratio in the main scanning direction is within the specified range.

- Adjustment specification: Within  $\pm 0.8\%$
  - When the copy dimension is smaller than the original
    - ↓
    - Make the value greater.
  - When the copy dimension is greater than the original
    - ↓
    - Make the value smaller.
- When the value is changed by one step, the ratio is changed by about 0.1%.



a → Magnification ratio in the main scanning direction  
b → Magnification ratio in the sub scanning direction

[AR-280/281 only]

- 7) Make a copy of A3 original with SPF, and measure the magnification ratio in the sub scanning direction.
- 8) Change value C so that the magnification ratio in the sub scanning direction is within the specified range.
- 9) Press the CA key to cancel the simulation.

## (7) Copy image position, image loss, void area adjustment

Before performing this adjustment, check that SIM 50-5 is set to 50. If not, set it to 50.

This adjustment uses SIM 50-2 and SIM 50-1.

The above two simulations are used in the following manner.

SIM 50-2: Rough adjustment

SIM 50-1: Fine adjustment

If the desired value is obtained by SIM 50-2, there is no need to perform SIM 50-1.



## (Adjustment items)

No.	Adjustment item	Operation mode		SIM 50-2 set item	SIM 50-1 set item	Adjustment value	Note
1	Lead edge image loss	Document table mode	SPF mode	IMAGE LOSS	IMAGE LOSS	1.5 to 3.0 mm	
2	Lead edge void area	Document table mode	SPF mode	DEN-A	DEN-A	1.5 to 3.0 mm	
3	Rear edge image loss		SPF mode	REAR LOSS (SPF)	REAR LOSS (SPF)	1.5 to 3.0 mm	AR-4XX series only
4	Rear edge void area	Document table mode	SPF mode	DEN-B	DEN-B		
5	Image reference position	Document table mode			RRC-A		
6	Paper timing	Document table mode	SPF mode		RRC-B		
7	Image reference position		SPF mode		SPF		
8	Distance between image lead edge position and scale of 10mm × 10	Document table mode		L1			
9	Distance between paper lead edge and image lead edge × 10	Document table mode		L2			
10	Distance between image lead edge position x scale of 10mm × 10		SPF mode	L3			

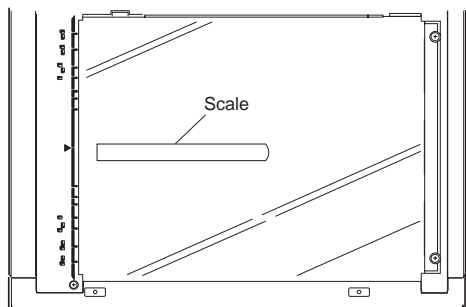
Adjustment items 1 ~ 4 can be adjusted either with SIM 50-1 or SIM 50-2.

The adjustment values of items 8 ~ 10 will affect the adjustment items 5 ~ 7 automatically.

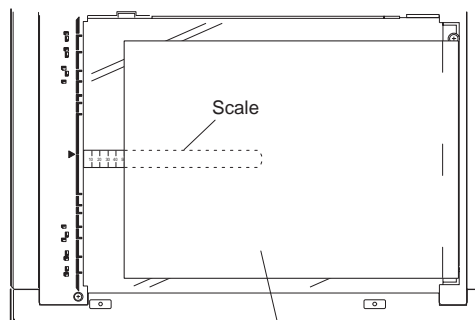
Therefore, adjusting the items 8 ~ 10 will lead to the same result as adjusting the items 5 ~ 7.

- 1) Place a scale on the document table as shown below, and make a normal (100%) copy.

Note that the scale must be placed in parallel to the scanning direction and that the scale lead edge must be clearly copied.



illust: AR-280

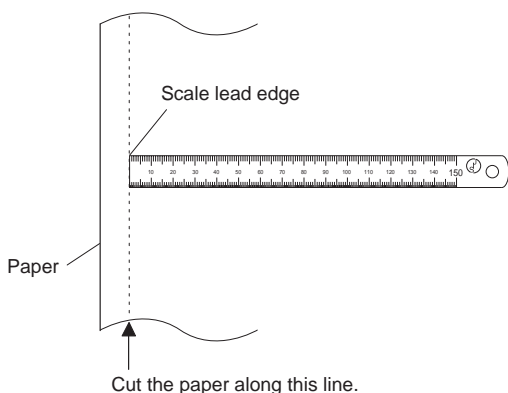


Paper (White paper)

illust: AR-280

- 2) Process the copied paper as shown below.

Cut the copied paper along the line at the edge of the scale image. The cut line and the scale image must form a right angle (90 degrees).

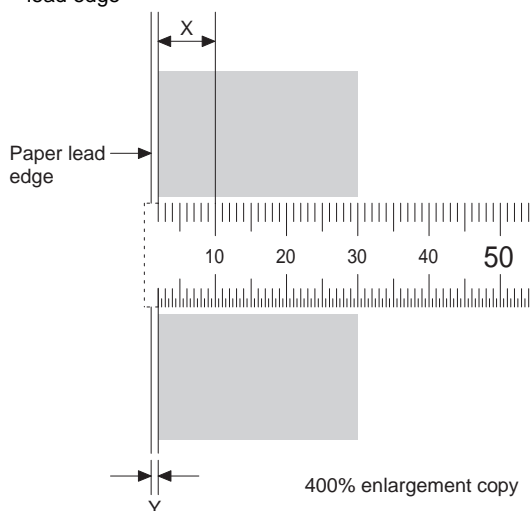


- 3) Place the scale on the document table as shown below.

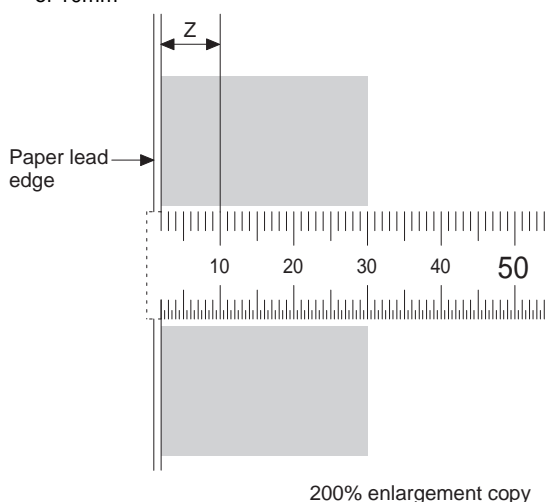
Note that the scale must be placed in parallel to the scanning direction and that the scale lead edge is in close contact with the document guide plate.



- 4) Enter the SIM 50-2 mode.
- 5) Set the image loss and DEN-A set values to "0."
- 6) Set all the values of L1, L2, and L3 to "0."
- 7) Make a copy at 400%. (Document table mode)
- 8) Measure dimensions X and Y of the copied scale image.  
 X: Distance between the copy image lead edge and the scale of 10mm  
 Y: Distance between the paper lead edge and the copy image lead edge



- 9) Set the document as in procedure 1) and 2) on the SPF, and make a copy at 200% in the SPF mode.
- 10) Measure the dimension L3 of the copied scale image.  
 Z: Distance between the copy image lead edge and the scale of 10mm



- 11) Enter L1, L2, and L3 as follows:  
 $L1 = X \times 10$   
 $L2 = Y \times 10$   
 $L3 = Z \times 10$
  - 12) Cancel the simulation mode, make a copy in the document table mode and in the SPF mode, and check that the lead edge image loss and the void area are in the specified range as shown below:  
 Lead edge image loss: 1.5 ~ 3.0mm  
 Lead edge void area: 1.5 ~ 3.0mm
- If the above condition is not satisfied.
- 13) Enter the SIM 50-1 mode.

- 14) Set the scale on the document table in the same manner as in procedure 3). Make a copy at 50% and at 400% in the document table mode.
- 15) Measure the distance between the paper lead edge and the copy image lead edge of 50% copy and 400% copy.
- 16) Check that there is no difference between the measured distance of 50% copy and that of 400% copy.  
 If the difference is more than 1.5mm, change and adjust the RRC-A value.

Repeat procedures 12) to 16) until the above condition is satisfied.

- 17) Use the document made in procedures 1) and 2) and make a copy at 50% and at 400% in the SPF mode.
- 18) Measure the distance between the paper lead edge and the copy image lead edge of 50% copy and that of 400% copy.
- 19) Check that there is no difference between the above measured distance of 50% copy and that of 400% copy.  
 If the difference between the distances is more than 1.5mm, change and adjust the SPF value.

Repeat procedures 17) and 18) until the above condition is satisfied.

- 20) If the lead edge void area is outside the specified range, change the DEN-A value.
- 21) If the lead edge image loss is outside the specified range, change the IMAGE LOSS value.
- 22) If the rear edge void area is outside the specified range, change the DEN-B value.
- 23) If the rear edge void area is outside the specified range, change the REAR LOSS (SPF) value.

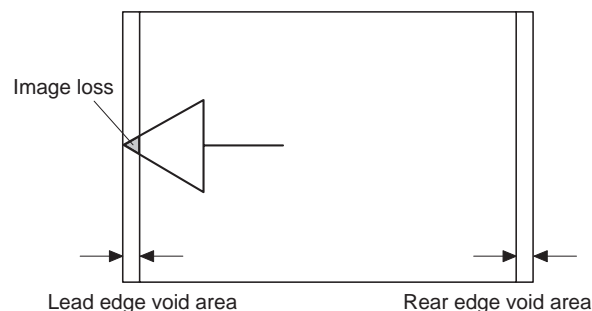
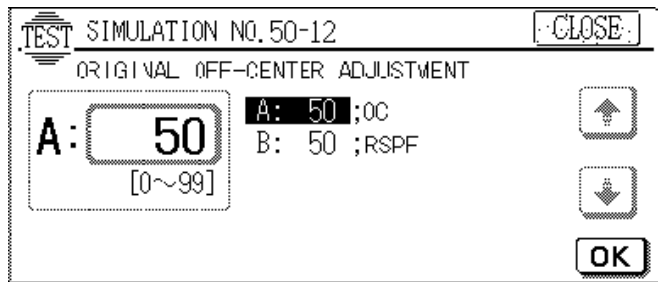
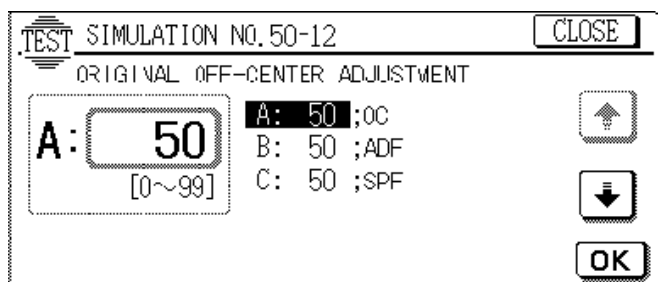


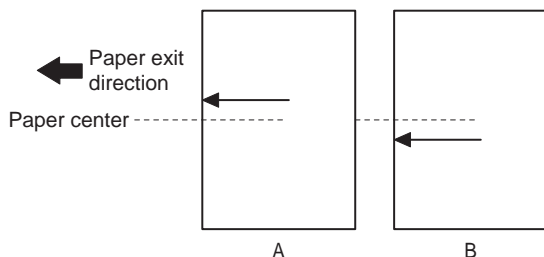
IMAGE LOSS	Lead edge image loss	1.5 to 3.0 mm	The greater the set value is, the greater the image loss is.
DEN-A	Lead edge void area	1.5 to 3.0 mm	The greater the set value is, the greater the void area is.
DEN-B	Rear edge void area	1.5 to 3.0 mm	The greater the set value is, the greater the void area is.
REAR LOSS	Rear edge image loss	1.5 to 3.0 mm	The greater the set value is, the greater the image loss is.

**(8) Original off-center adjustment**

- 1) Place the reference original for the off-center adjustment on the original table.
- 2) Execute SIM 50-12.

**(AR-501/505)****(Other models)**

- 3) Press the PRINT button after lighting the RPL, and a copy will be made. If the arrow image on the copy paper is shifted from the center line as shown below, change the set value and adjust.



In the case of A                      decrease the set value.  
 In the case of B                      increase the set value.  
 Adjustment specification:          Within  $\pm 1.7\text{mm}$   
 (One point of the set value corresponds to the change of about 0.1mm.)

**[In the case of the AR-280]**

- 4) Make a copy of A4 ( $8\frac{1}{2} \times 11$ ) original with the SPF, and measure the off-center.
- 5) Change value C so that the off-center is within the specified range.

**[In the case of the AR-285/335]**

- 4) Make a copy of A4 ( $8\frac{1}{2} \times 11$ ) original with the RADF, and measure the off-center.
- 5) Change value B so that the off-center is within the specified range.
- 6) Press the CA key to cancel the simulation.

**D. Image density adjustment**

The image density adjustment is required for the following copy quality mode by using the simulation.

There are two methods; the collective adjustment and the individual adjustment of the copy quality mode.

**Copy mode (AR-280/285/335)**

Copy quality mode		Collective adjustment	Individual adjustment
Binary value mode	Auto mode	SIM46-2	
	Character mode		SIM46-9
	Character/Photo mode		SIM46-10
	Photo mode		SIM46-11
Multi value (Hifi) mode	Auto mode	SIM46-3	
	Character mode		SIM46-5
	Character/Photo mode		SIM46-6
	Photo mode		SIM46-7

**Copy mode (AR-250/281/286/336/405)**

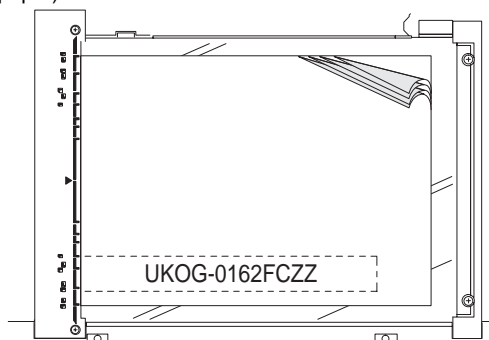
Copy quality mode		Collective adjustment	Individual adjustment
Binary value mode	Auto mode	SIM46-2	
	Character mode		SIM46-9
	Character/Photo mode		SIM46-10
	Photo (error diffusion) mode		SIM46-11
Multi value (Hifi) mode	Photo (Dither pattern) mode (Japan only)	SIM46-2	SIM46-7

**Copy mode (AR-501/505)**

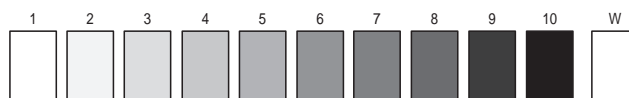
Copy quality mode		Collective adjustment	Individual adjustment
Binary value mode	Auto mode	SIM46-2	
	Character mode		SIM46-9
	Character/Photo mode		SIM46-10
	Photo (error diffusion) mode		SIM46-11

**(1) Test chart setting**

- 1) Place a test chart (UKOG-0162FCZZ) on the original table.
- 2) Place several sheets of A3 ( $11 \times 17$ ) white paper (Sharp's specified paper) on the test chart at the center reference.



illustr: AR-280



## Test chart comparison

UKOG-0162FCZZ DENSITY No.	1	2	3	4	5	6	7	8	9	10	W
UKOG-0089CSZZ DENSITY No.	0.1		0.2		0.3				0.5	1.9	0
KODAK GRAY SCALE		1		2		3		4		19	A
SHARP CORPORATION MADE IN JAPAN											

**(2) Density adjustment procedure****a. Collective adjustment of two or more copy quality modes**

Normally this adjustment is performed with SIM 46-2 and SIM 46-3. In this method, two or more copy density adjustments in different modes can be adjusted collectively.

- 1) Execute SIM 46-2 and SIM 46-3.

(AR-280/285/335)  
(Binary value mode)

Quality mode	Linked simulation data
AE3.0 (AE)	
CH3.0 (Character)	Sim46-9
MIX3.0 (Character/Photo)	Sim46-10
PH3.0 (Photo)	Sim46-11

(AR-250/281/286/336/405)

Quality mode	Linked simulation data
AE3.0 (AE)	
CH3.0 (Character)	Sim46-9
MIX3.0 (Character/Photo)	Sim46-10
PH3.0 (2)	Sim46-11 (Photo error diffusion)
PH3.0 (256)	Sim46-7 (Photo multi value dither) (Japan only)

(AR-501/505)  
(Binary value mode)

Quality mode	Linked simulation data
AE3.0 (AE)	
CH3.0 (Character)	Sim46-9
MIX3.0 (Character/Photo)	Sim46-10
PH3.0 (Photo)	Sim46-11

- 2) Press the COPY button to make a copy.

Check that the copy density is as shown in the table below. If not, change the adjustment value.

● Adjustment spec					
Mode	EXP	Chart No.	Adjustment level	Chart No.	Adjustment level
Character	3	3	Copied.	2	Not copied.
Character /Photo	3	3	Copied.	2	Not copied.
Photo	3	3	Copied.	2	Not copied.
Auto		3	Copied.	2	Not copied.

If the copy density is too light, increase the adjustment value.  
If the copy density is too dark, decrease the adjustment value.  
Adjustment range: 30 ~ 170

**b. Individual adjustment of each copy quality mode**

This adjustment is used when a different density level for different copy quality mode is required. SIM 46-5 to -7 and SIM 46-9 to -11 are used.

- 1) Execute the simulation corresponding to the copy quality mode to be adjusted.

TEST SIMULATION NO. 46-09 CLOSE

EXP LEVEL SETUP COPIER(CHAR.2)

100 [30~170]

1.0: 100 3.5: 100  
1.5: 100 4.0: 100  
2.0: 100 4.5: 100  
2.5: 100 5.0: 100  
3.0: 100 ENTER

- 2) Press the COPY button to make a copy.

Check that the copy density is as shown in the table below. If not, change the adjustment value.

For the auto mode, there is only one adjustment value. For the other modes, the adjustment value for each density level must be adjusted.

**(3) RSPF exposure adjustment procedure**

(Employed chart)

UKOG-0121FCZ3 for inch series  
UKOG-0121FCZ4 for AB series

Make a copy of the chart in the AE exposure OC mode.

Make a copy of the chart in the RSPF mode.

Compare the above two copies to check that the difference is within 0.5 scale. If the difference is more than 0.5 scale, adjust with SIM 46-20.

TEST SIMULATION NO. 46-20 CLOSE

OC/RSPF EXP. ADJUSTMENT

A: 60 [0~100] A: 60 ; OC/RSPF

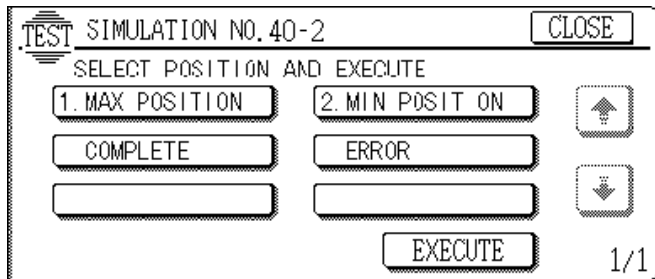
OK

When the RSPF is darker, increase the value.  
When the RSPF is lighter, decrease the value.

## E. Paper feed

### (1) Manual paper feed size detection level adjustment

1) Execute SIM 40-2.



2) Extend the manual paper feed guide fully.

3) Press [MAX POSITION] on the LCD of the operation panel to highlight it.

4) Press [EXECUTE] on the LCD of the operation panel to highlight it.

If normal, the highlight is shifted from [MAX POSITION] to [MIN POSITION].

5) Narrow the manual paper feed tray guide fully.

6) Press [EXECUTE] on the LCD of the operation panel to highlight it.

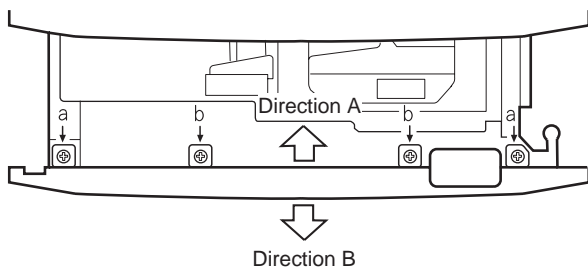
Check that [COMPLETE] is highlighted.

7) Press the CA key to cancel the simulation.

### (2) Paper feed off-center adjustment

When the center of No. 1 and No. 2 paper feed trays is shifted with the reference of manual paper feed and the self print, adjust as follows.

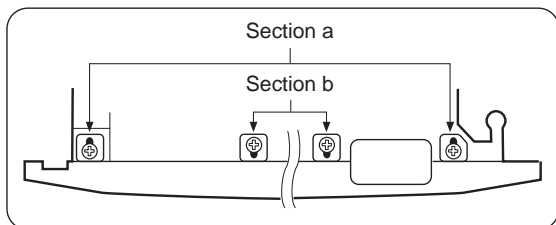
1) Loosen the fixing screws a and b of the front cabinet of the paper feed tray.



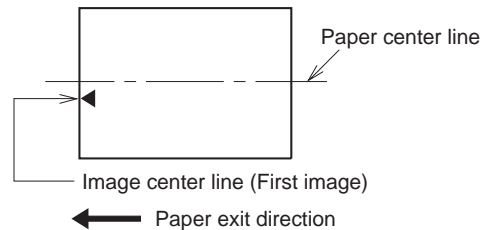
\* When fixing the front cabinet, the clearance between fixing screw a and the cabinet and the clearance between fixing screw b and the cabinet are symmetric.

[Reference view]

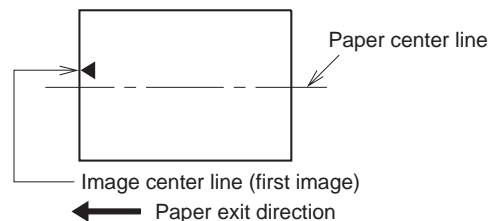
(Reference view)



2) Shift the front cabinet and adjust.



Move the front cabinet in the direction of A.



Move the front cabinet in the direction of B.

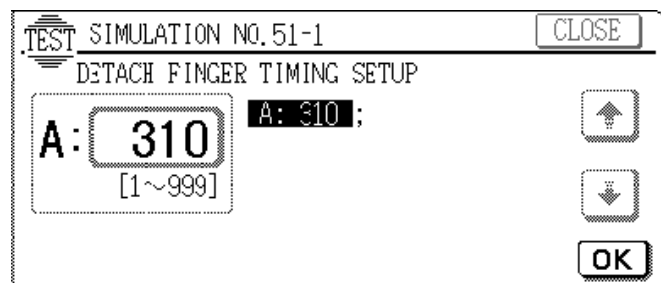
## F. Paper transport

### (1) Separation pawl operation timing adjustment

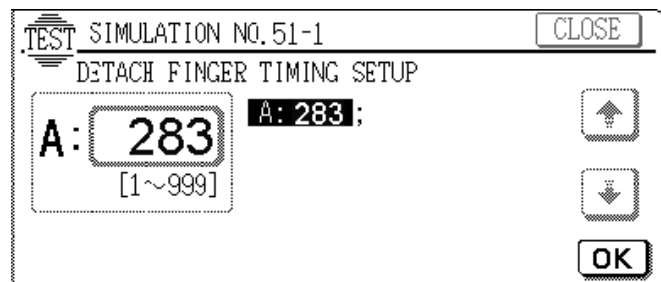
This adjustment is to adjust the time from when the resist roller is turned on to when the drum separation pawl is turned on.

1) Execute SIM 51-1.

(AR-250/280/281/285/286/335/336/405)



(AR-501/505)



2) Change value A and adjust the separation pawl operating timing.

Initial value:	310 ms (283 ms for AR-501/505)
1 step:	1ms
Adjustment range:	1 ~ 999ms
If the adjustment value is improper, a paper jam may resulted.	

## (2) Resist amount adjustment

This adjustment is to adjust the timing (paper contact pressure) for the resist roller in each paper feed mode.

By changing the time difference (timing) between the transport roller ON and the resist roller ON, the paper contact pressure on the resist roller is changed.

The adjustment value must be changed according to the copy paper quality.

- 1) Execute SIM 51-2.

- 2) Change the adjustment value in each mode.

Mode		Initial value (ms)			Set value (ms)
		AR-2XX AR-3XX	AR-4XX	AR-5XX	
A: MANUAL	Manual paper feed	31	55	54	0 ~ 100
B: TRAY	Tray paper feed	55	45	25	0 ~ 100
C: LCC	LCC paper feed	45	45	25	0 ~ 100
D: ADU	ADU paper feed	60	50	25	0 ~ 100
E: TRAY	Tray paper feed (Low)	45	60	—	0 ~ 100
F: LCC	LCC paper feed (Low)	45	—	—	0 ~ 100
G: SPF	SPF paper feed	—	—	—	0 ~ 100
H: DESK	RSPF paper feed	—	—	25	0 ~ 100

1 step: 1ms

\* When the set value is too small, the copy image position for the paper may vary.

\* When the set value is too great, a paper jam may occur.

## G. Others

### (1) Original size sensor detection level adjustment

- 1) Execute SIM 41-2.

(Fig. 1)

- 2) Execute the sensor adjustment without original.

With the original cover open, without original on the table glass, press the [EXECUTE] key to perform the sensor adjustment without original. After adjustment, NORMAL or ABNORMAL is displayed.

(Fig. 2)

(Fig. 3)

(In the case of NORMAL)

The screen of Fig. 2 is displayed for 1 sec, then the screen of Fig. 3 is displayed, and the sensor adjustment without original is completed.

(Fig. 4)

(In the case of ABNORMAL)

The screen of Fig. 4 is displayed, and the sensor of abnormality is highlighted. In this case, confirm the original empty state and press the [EXECUTE] key to perform the sensor adjustment again. 3) Perform the sensor adjustment without original.

- 3) Execute the sensor adjustment with original.

With the original cover open, place five sheets of A3 originals on the glass by fitting them to the original guide, press the [EXECUTE] key to perform the sensor adjustment with originals. After adjustment, NORMAL or ABNORMAL is displayed.

(In the case of NORMAL)

The screen of Fig. 2 is displayed for 1 sec, then the screen of Fig. 3 is displayed to terminate the adjustment of the original sensor.

\* In this case, the display item of "2. A3 ORIGINAL" is shown instead of "1. NO ORIGINAL" at the left top.

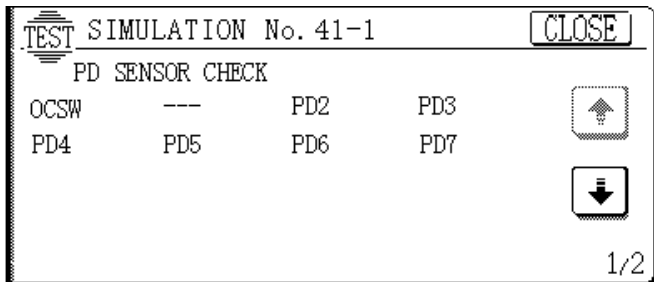
(In the case of ABNORMAL)

The screen of Fig. 4 is displayed for 1 sec, and the sensor of abnormality is highlighted. In this case, check that there is no A3 original on the original glass, and press the [EXECUTE] key to perform the sensor adjustment operation again.

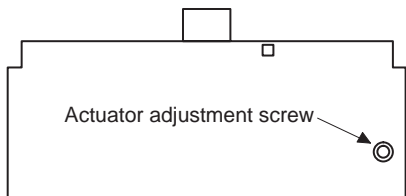
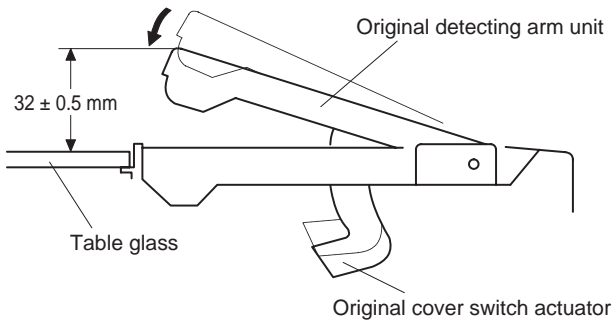
\* In this case, the display item of "2. A3 ORIGINAL" is shown instead of "1. NO ORIGINAL" at the left top.

## (2) Original size sensor position adjustment

1) Execute SIM 41-1.



- Slowly tilt the original detecting arm unit, and loosen the original cover switch actuator adjustment screw, and slide and adjust the actuator so that the highlighted display of OCSW is changed to the normal display when the height of the arm unit top from the table glass is  $32 \pm 0.5$  mm.  
(When the original cover switch ON timing is shifted, the original detection function may not work properly.)



## (3) Waste toner full detection level adjustment

1) Fill water to the empty waste toner bottles to make dummy bottle A and B.

Dummy bottle A: 480g (including the bottle weight)

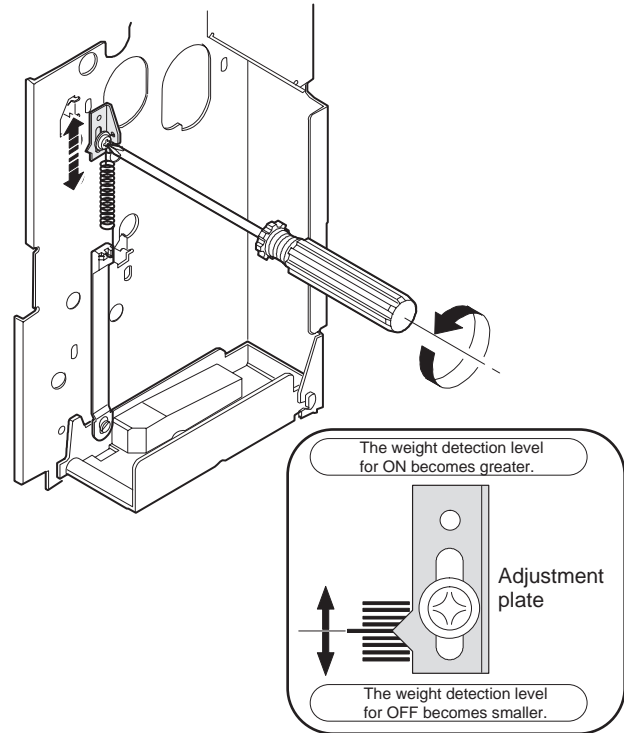
Dummy bottle B: 560g (including the bottle weight)

2) Turn on the power switch of the copier.

3) Install dummy bottle A (480g) to the waste toner bottle detecting unit and check that the weight detection is OFF.

4) Install dummy bottle B (500g) instead and check that the weight detection is ON.

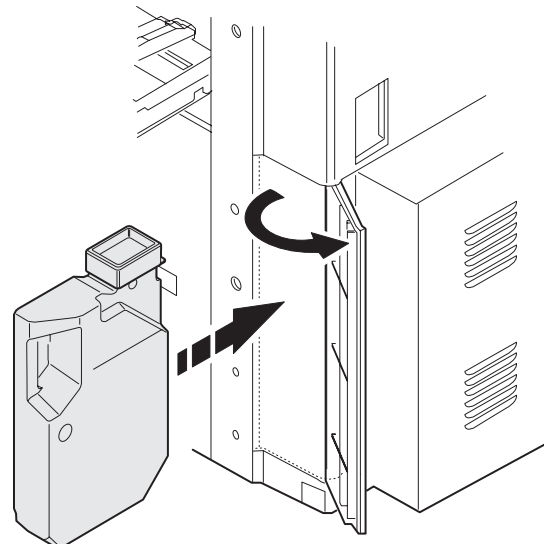
"Weight detection ON" means that the display of "REPLACE TONER BOTTLE" on the panel display is ON. "Weight detection OFF" means that it is OFF.



Initial value: 2 scales down from the center

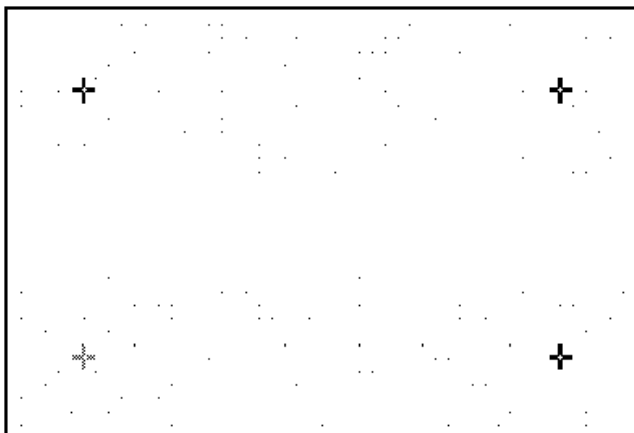
### [When ON/OFF display is improper]

Loosen the fixing screw of the positioning plate. Move the positioning plate up and down to adjust so that the weight detection is made as specified.



#### (4) Touch panel adjustment

- 1) Execute SIM 65-1.



- 2) When the "+" section is pressed, it turns to gray. When all the four points are pressed, the touch panel adjustment is completed and the machine goes into the simulation sub number entry state.

In case of abnormality, the mode returns to the input mode.

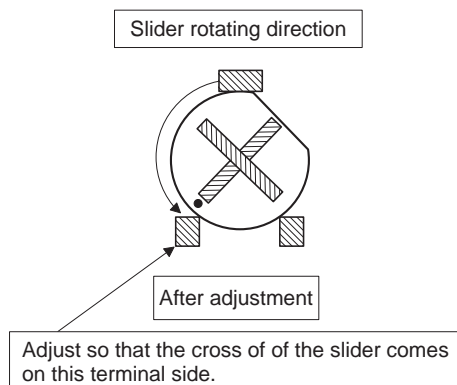
\* Do not use a sharp pin or needle to press the "+" points.

#### (5) Key touch sound volume adjustment

This adjustment must be performed in the following cases:

- When the key touch sound volume is too small.
- When the key touch sound volume is too great.
- When the operation control PWB is replaced.

- 1) Remove the operation control PWB.
- 2) Turn the VR1 slider counterclockwise to set at about 135 degrees.



- 3) Use an actual machine and check the key input operations.

After this adjustment:

When the key touch sound volume is too small, turn VR1 clockwise.

When the key touch sound volume is too great, turn VR1 counterclockwise.

#### H. SPF

##### (1) Hinge height check and adjustment (Image distortion adjustment)

(Adjustment 1)

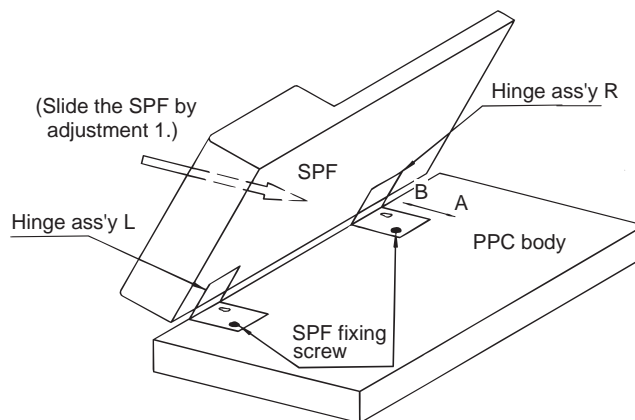
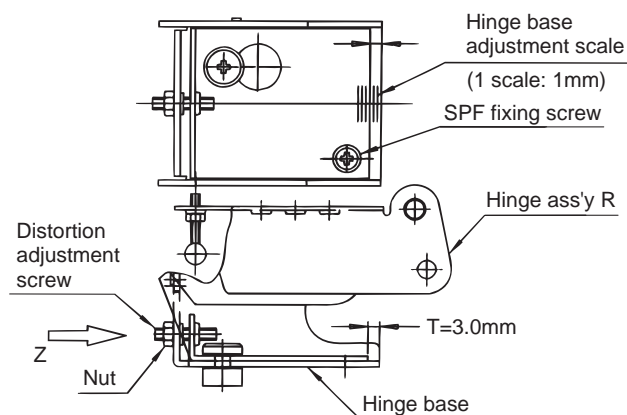
Hinge ass'y R hinge space dimension adjustment

- (1) Loosen the two fixing screws of SPF.
- (2) Loosen the nuts, turn the distortion adjustment screw and adjust dimension T to 3.0 mm.
- (3) Tighten two fixing screws of SPF and fix the hinge base.
- (4) Fix the distortion adjustment screw with the nut.

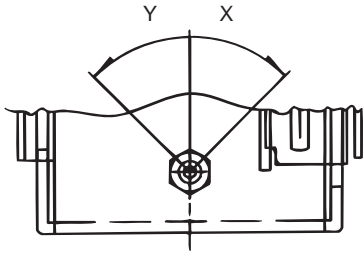
When the distortion adjustment screw is turned in the direction of X (clockwise), the dimension T is increased.

(Turn the distortion adjustment screw in the direction of X (clockwise), and shift the SPF in the direction of arrow as shown above to adjust the dimension T.)

When the distortion adjustment screw is turned in the direction Y (counterclockwise), the dimension T is decreased.



(SPF adjustment direction by turning the distortion adjustment screw)



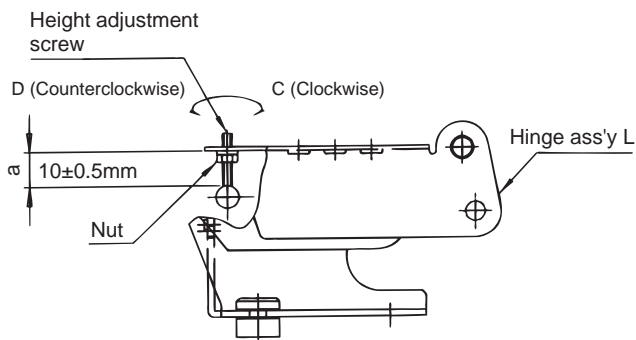
#### (Adjustment 2)

##### Hinge ass'y L SPF height a adjustment

- (1) Loosen the nut and turn the height adjustment screw to adjust dimension a to  $10 \pm 0.5\text{mm}$ .
- (2) After adjusting the height, fix the height adjustment screw with the nut.

Turn the distortion adjustment screw in the direction of C (clockwise) to increase dimension a.

Turn the distortion adjustment screw in the direction of D (counterclockwise) to decrease the dimension a.

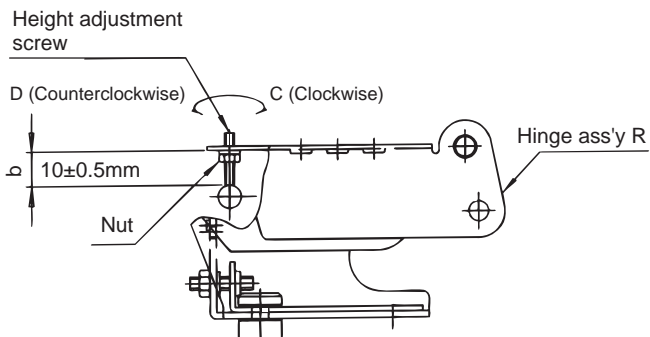


##### Hinge ass'y R SPF height b adjustment

- (1) Loosen the nut and turn the height adjustment screw to set dimension b to  $10 \pm 0.5\text{mm}$ .
- (2) After adjusting the height, fix the height adjustment screw and loosen the nut.

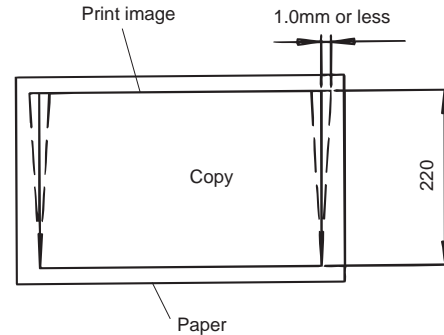
When the height adjustment screw is turned in the direction of C (clockwise), the dimension b is increased.

When the height adjustment screw is turned in the direction of D (counterclockwise), the dimension b is decreased.



#### (Image distortion specification)

The right angle distortion of the short side for the long side must be adjusted to less than 1.0 mm.



#### (Distortion pattern and adjustment)

- 1) Check which one of the copy image patterns 1 ~ 8 shown below is like the copy image distortion.
- 2) Follow the adjustment procedure according to the copy image pattern.

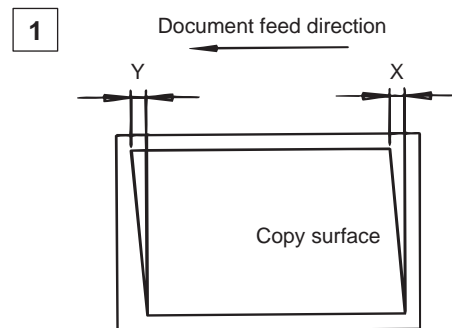
(Refer to adjustment 1, 2.)

#### Note

- 1) When the hinge ass'y R height adjustment is performed, be sure to perform adjustment (2) (Open/close sensor adjustment) again.

#### Distortion adjustment procedure

##### (Copy image pattern 1)



#### (Adjustment procedure)

- 1) Perform adjustment 1 and adjust the distortion in the X section.

#### Adjustment reference

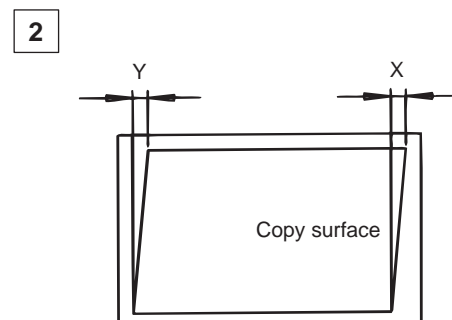
When the hinge space T dimension is changed by 1mm, the X dimension is changed by 0.5 ~ 0.7mm,

- 2) If the distortion in the Y section cannot be adjusted with adjustment 1, perform adjustment 2.

#### Adjustment reference

When the hinge a section dimension is changed by 1mm, the Y dimension is changed by 0.2 ~ 0.4mm,

##### (Copy image pattern 2)





(Adjustment procedure)

- 1) Perform adjustment 1 to adjust the distortion in the X section.

**Adjustment reference**

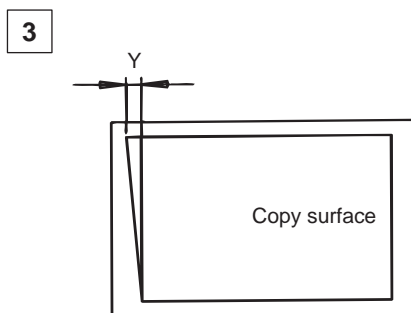
When the hinge base T section dimension is changed by 1mm, the X dimension is changed by 0.5 ~ 0.7mm.

- 2) If the distortion in the Y section cannot be adjusted with adjustment 1, perform adjustment 2.

**Adjustment reference**

When the hinge a section dimension is changed by 1mm, the Y dimension is changed by 0.2 ~ 0.4mm.

(Copy image pattern 3)



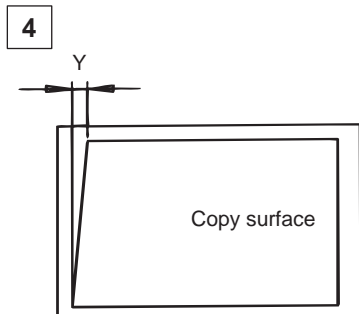
(Adjustment procedure)

- 1) Perform adjustment 2 to adjust the distortion in the Y section.

**Adjustment reference**

When the hinge section a dimension is changed by 1mm, the Y dimension is changed by 0.2 ~ 0.4mm.

(Copy image pattern 4)



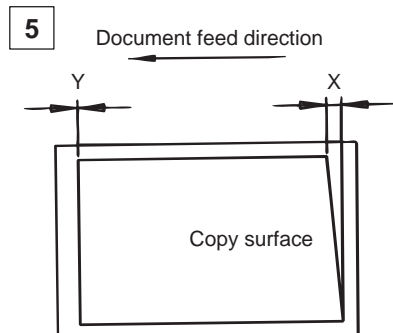
(Adjustment procedure)

- 1) Perform adjustment 2 to adjust the distortion in the Y section.

**Adjustment reference**

When the hinge section a dimension is changed by 1mm, the Y dimension is changed by 0.2 ~ 0.4mm.

(Copy image pattern 5)



(Adjustment procedure)

- 1) Perform adjustment 1 to adjust the distortion in the X section.

**Adjustment reference**

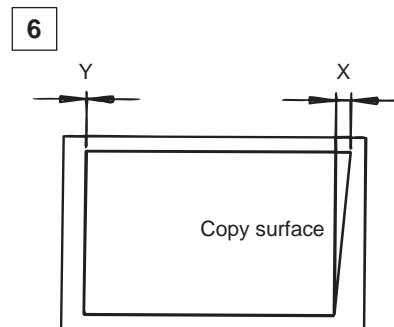
When the hinge base T section dimension is changed by 1mm, the X dimension is changed by 0.5 ~ 0.7mm.

- 2) If the distortion in the Y section cannot be adjusted with adjustment 1, perform adjustment 2.

**Adjustment reference**

When the hinge section a dimension is changed by 1mm, the Y dimension is changed by 0.2 ~ 0.4mm,

(Copy image pattern 6)



(Adjustment procedure)

- 1) Perform adjustment 1 to adjust the distortion in the X section.

**Adjustment reference**

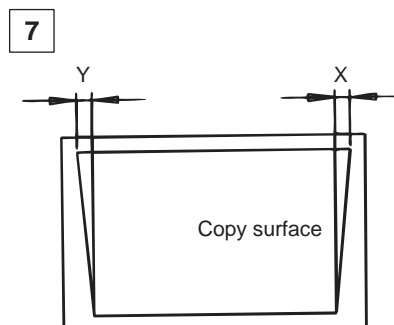
When the hinge base T section dimension is changed by 1mm, the X dimension is changed by 0.5 ~ 0.7mm.

- 2) If the distortion in the Y section cannot be adjusted with adjustment 1, perform adjustment 2.

**Adjustment reference**

When the hinge section a dimension is changed by 1mm, the Y dimension is changed by 0.2 ~ 0.4mm,

(Copy image pattern 7)



(Adjustment procedure)

- 1) Perform adjustment 1 to adjust the distortion in the X section.

**Adjustment reference**

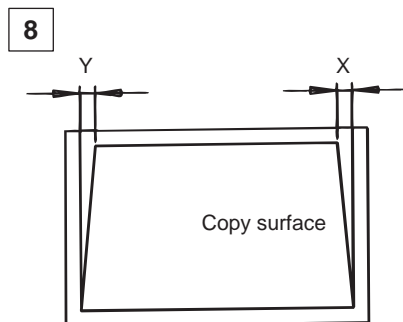
When the hinge base T section dimension is changed by 1mm, the X dimension is changed by 0.5 ~ 0.7mm.

- 2) If the distortion in the Y section cannot be adjusted with adjustment 1, perform adjustment 2.

**Adjustment reference**

When the hinge base T dimension is changed by 1mm, the Y dimension is changed by 0.2 ~ 0.4mm,

(Copy image pattern 8)



(Adjustment procedure)

- 1) Perform adjustment 1 to adjust the distortion in the X section.

**Adjustment reference**

When the hinge base T section dimension is changed by 1mm, the X dimension is changed by 0.5 ~ 0.7mm.

- 2) If the distortion in the Y section cannot be adjusted with adjustment 1, perform adjustment 2.

**Adjustment reference**

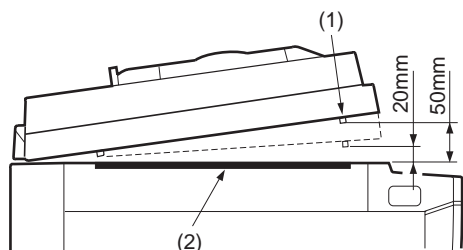
When the hinge section a dimension is changed by 1mm, the Y dimension is changed by 0.2 ~ 0.4mm,

**(2) Open/close sensor adjustment**

- 1) Execute SIM 2-2 by the key operation of the copier.

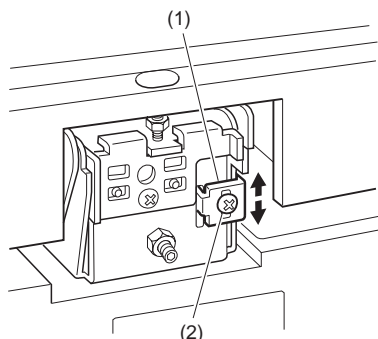
With the above operation, "AUOD" (automatic document feeder open/close sensor) is displayed on the message screen.

- 2) Check that the open/close sensor (AUOD) is ON when the distance between the base height reference projection (1) inside the automatic document feeder and the table glass (2) is 20 ~ 50mm.



If the distance is shifted, adjust as follows.

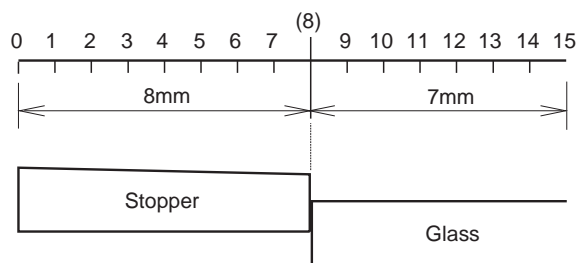
- 3) Loosen the fixing screw (2) of the open plate (1) at the rear of the hinge on the right side of the automatic document feeder, and move the open plate up and down to adjust.



After completion of the adjustment, press the [CA] key to cancel the mode.

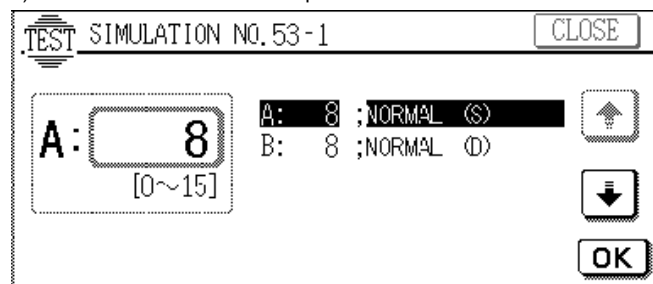
**I. RADF****(1) Document lead edge stop position adjustment**

- The ADF document lead edge stop position is adjusted by using SIM 53.
- When shipping, the lead edge is set to (8). An adjustment may be required depending on documents. The adjustment range is 8mm (8 steps) in the stopper side and 7mm (7 steps) in the glass side. (1mm: 1 step) For each mode of single, and duplex, the adjustment value can be set independently.



Viewed from the operator

- 1) Execute SIM 53-1 on the copier.



- 2) Enter the stop position adjustment value in each mode.

[Explanation of abbreviation]

NORMAL (S):

Single, normal paper stop position adjustment

NORMAL (D):

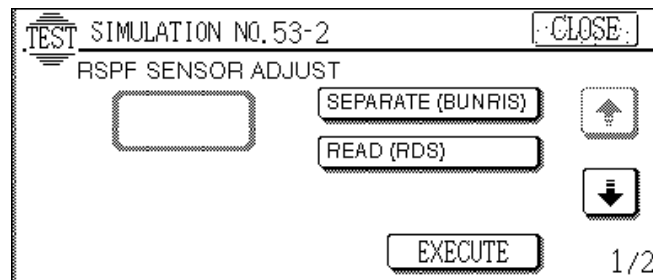
Duplex, normal paper stop position adjustment

08: ±0.0000mm (Initial value)	00: -8.000mm	09: +1.000mm
	01: -7.000mm	10: +2.000mm
	02: -6.000mm	11: +3.000mm
	03: -5.000mm	12: +4.000mm
	04: -8.000mm	13: +5.000mm
	05: -8.000mm	14: +6.000mm
	06: -8.000mm	15: +7.000mm
	07: -8.000mm	

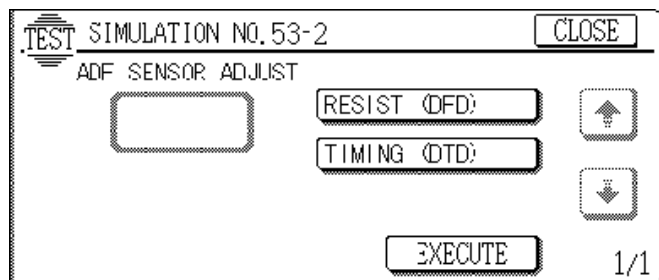
**(2) Resist/timing/paper exit sensor adjustment**

- 1) Execute SIM 53-2 on the copier

(AR-501/505)



## (Other models)



- 2) Select each sensor and press the EXECUTE key, and the adjustment will be performed automatically.

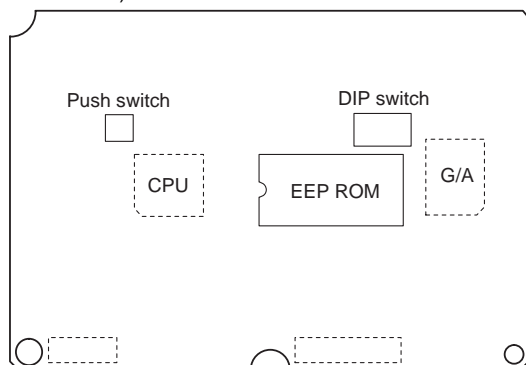
RESIST (DFD): Resist sensor  
 TIMING (DTD): Timing sensor  
 REVERSE (RDD): Reverse sensor \*1

\*1: Only when the AR-RF1 is installed.

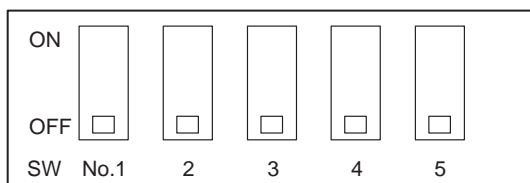
**(3) Test mode with DIP switch**

The RADF (ADF) single unit operation can be checked with the DIP switch on the control PWB shown below.

(Control PWB view)

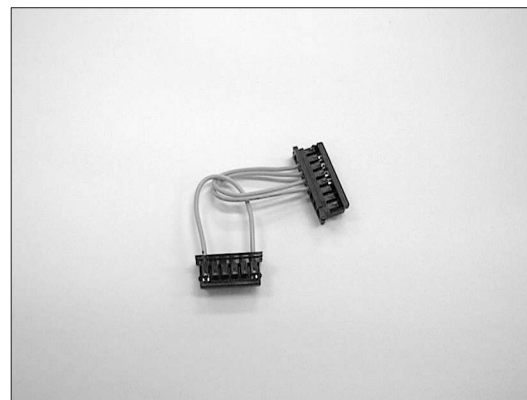
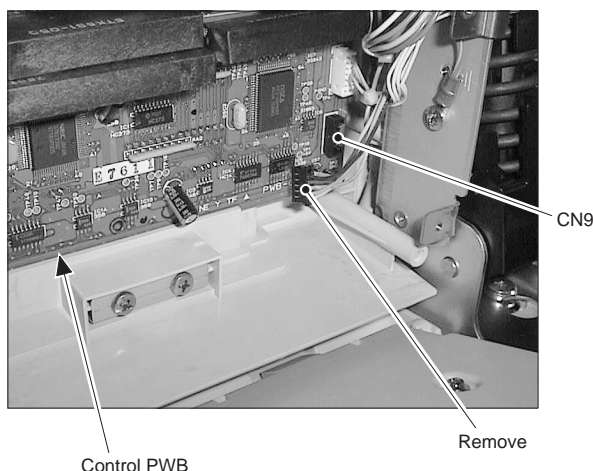


(DIP switch view)



(Operating procedure)

- 1) Remove the control PWB cover.
- 2) Disconnect the connector from the CN9 on the control PWB, and connect the short connector (OCW4074K526//) instead.

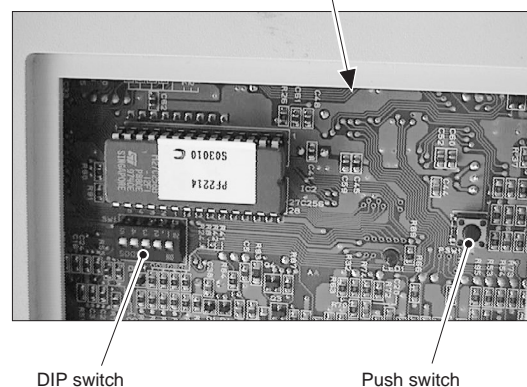


Short connector (OCW4074K526//)

- 3) Remove the ADF/RADF top cover, and set the DIP switch on the control PWB to the desired test mode. While pressing the push switch ON, turn on the power of the machine.

(With the above operation, the machine enters the test mode.)

Control PWB (Back)



- 4) Turn on the push switch on the control PWB.

(Test operation is started.)

(To switch to another test mode, set the DIP switch on the control PWB to the desired test mode, and open/close the ADF/RADF paper feed section cover (microswitch FGOS it turned OFF and ON).

- DIP switch 3 meaning

	ON	OFF
DIP switch 3	For AB series	For inch series

- Kinds of test modes and setting of DIP switch

No.	Test mode name	DIP switch
a	Single paper pass mode	All OFF
b	Duplex paper pass mode (AR-RF1 only)	1 ON, the others OFF
c	Single aging mode	1, 3 ON, 2, 4, 5 OFF
d	Duplex aging mode (AR-RF1 only)	4 ON, the others OFF
e	Load check mode	1, 5 ON, 2, 3, 4, OFF
f	EEPROM initializing mode + all sensors adjustment mode	3, 5 ON, 1, 2, 4, OFF
g	Resist sensor adjustment mode	4, 5 ON, 1, 2, 3, OFF
h	Timing sensor adjustment mode	1, 4, 5, ON, 2, 3, OFF
i	Paper exit sensor adjustment mode (AR-RF1 only)	3, 4, 5, ON, 1, 2, OFF

**a. Single paper pass mode (with paper)**

When documents are set on the paper feed tray, the document feed LED lights up. When the push switch is pressed, all documents on the paper feed tray are fed.

**b. Duplex paper pass mode (with paper) ... AR-RF1 only**

When documents are set on the paper feed tray, the document feed LED lights up. When the push switch is pressed, all documents on the paper feed tray are fed.

**c. Single aging mode (without paper)**

When the push switch is pressed, aging is started. The operation timing is made by detection of each document size on the tray.

**d. Duplex aging mode (without paper) ... AR-RF1 only**

When the push switch is pressed, aging is started. The operation timing is made by detection of each document size on the tray.

**e. Load check mode**

<AR-RF1>

Every time when the push switch is pressed, the operation is performed in the sequence of 1) ~ 21)

- 1) Ready LED OFF/Document remain LED OFF
- 2) Flapper solenoid ON, wait shutter solenoid OFF
- 3) Flapper solenoid OFF
- 4) Ready LED ON/Document remain LED OFF
- 5) Ready LED ON/Document remain LED ON, wait shutter solenoid ON + Paper feed motor normal rotation 250mm/s (preliminary paper feed operation)
- 6) Ready LED OFF/Document remain OFF, paper feed motor OFF
- 7) Ready LED ON/Document LED ON, paper feed motor reverse drive 250mm/s (two-step extending operation)
- 8) Ready LED OFF/Document remain LED OFF, paper feed motor OFF
- 9) Ready LED ON/Document LED ON, paper feed motor reverse drive 800mm/s (paper feed operation)
- 10) Ready LED OFF/Document remain LED OFF, paper feed motor OFF
- 11) Ready LED ON/Document LED ON, transport motor normal drive 800mm/s
- 12) Ready LED OFF/Document remain LED OFF, transport motor OFF
- 13) Ready LED ON/Document LED ON, transport motor reverse drive 800mm/s
- 14) Ready LED OFF/Document remain LED OFF, transport motor OFF
- 15) Ready LED ON/Document LED ON, reverse motor normal drive 800mm/s (reverse operation)
- 16) Ready LED OFF/Document remain LED OFF, reverse motor OFF
- 17) Ready LED ON/Document LED ON, reverse motor normal drive 800mm/s (paper exit operation)
- 18) Reverse motor normal rotation speed change 800 → 300mm/s (paper exit speed reduction)
- 19) Ready LED OFF/Document remain LED OFF, reverse motor OFF
- 20) Ready LED ON/Document LED ON, reverse motor normal drive 300mm/s (paper exit speed reduction)
- 21) Ready LED OFF/Document remain LED OFF, reverse motor OFF

Return to 1).

<AR-AF1>

Every time when the push switch is pressed, the operation is performed in the sequence of 1) - 24).

- 1) Ready LED ON/Document LED ON, wait shutter solenoid ON
- 2) Ready LED OFF/Document remain LED OFF, wait shutter solenoid OFF
- 3) Ready LED ON/Document LED ON, wait shutter solenoid ON + paper feed motor normal drive 250mm/s (preliminary paper feed operation)
- 4) Ready LED OFF/Document remain LED OFF, wait shutter solenoid OFF + paper feed motor OFF
- 5) Ready LED ON/Document LED ON, paper feed motor reverse drive 250mm/s
- 6) Ready LED OFF/Document remain LED OFF, paper feed motor OFF
- 7) Ready LED ON/Document LED ON, paper feed motor reverse drive 831mm/s
- 8) Ready LED OFF/Document remain LED OFF, paper feed motor OFF
- 9) Ready LED ON/Document LED ON, paper feed motor reverse drive 831mm/s
- 10) Paper feed motor reverse rotation speed change 831 → 300mm/s
- 11) Ready LED OFF/Document remain LED OFF, paper feed motor OFF
- 12) Ready LED ON/Document LED ON, transport motor normal drive 831mm/s
- 13) Ready LED OFF/Document remain LED OFF, transport motor OFF
- 14) Ready LED ON/Document LED ON, transport motor normal drive 831mm/s
- 15) Transport motor normal rotation speed change 831 → 300mm/s
- 16) Ready LED OFF/Document remain LED OFF, transport motor OFF
- 17) Ready LED ON/Document LED ON, transport motor normal drive 831mm/s
- 18) Transport motor normal rotation speed change 831 → 300mm/s
- 19) Transport motor normal rotation speed change 300 → 831mm/s
- 20) Ready LED OFF/Document remain LED OFF, transport motor OFF
- 21) Ready LED ON/Document LED ON, transport motor reverse drive 208mm/s (switchback operation)
- 22) Ready LED OFF/Document remain LED OFF, transport motor OFF
- 23) Ready LED ON/Document LED ON, paper exit motor normal drive 300mm/s
- 24) Ready LED OFF/Document remain LED OFF, paper exit motor OFF

Return to 1).

**f. EEPROM initializing + all sensors adjustment mode**

When the push switch is pressed, the EEPROM is initialized. At that time, the LED blinks at the cycle of 100msec.

After completion of EEPROM initializing, the LED turns ON. In case of an error in the EEPROM initializing, the LED blinks at the cycle of 2000msec.

Then all sensors adjustment is started. At that time, the document remain LED blinks at the cycle of 100msec. After completion of all sensors adjustment, the document remain LED turns ON. In case of an error in the all sensors adjustment, the document remain LED blinks at the cycle of 2000msec.

\* Only when the EEPROM is successfully completed, the all sensors adjustment is performed.

Kinds of JAM, error	LED display
EEPROM initializing error	Ready LED blinks at the cycle of 2000msec.
All sensors adjustment error	Document remain LED blinks at the cycle of 2000msec

**g. Resist sensor adjustment mode**

Set the DIP switch (4, 5 to ON, 1, 2, 3 to OFF) and press the push switch. Each sensor adjustment is performed. At that time, the LED blinks at the cycle of 100msec.

After completion of the sensor adjustment, the LED turns ON. In case of an error in the sensor adjustment, the LED blinks at the cycle of 100msec.

Kinds of JAM, error	LED display
Sensor adjustment upper limit error	Document remain LED turns OFF. Ready LED blinks at the cycle of 100msec.
Sensor adjustment lower limit error	Document remain LED blinks at the cycle of 100msec. Ready LED turns OFF

\* This mode can be adjusted with SIM 53-2.

**h. Timing sensor adjustment mode**

Set the DIP switch (1, 4, 5 to ON, 2, 3 to OFF) and press the push switch. Each sensor adjustment is performed. At that time, the LED blinks at the cycle of 100msec.

After completion of the sensor adjustment, the LED turns ON. In case of an error in the sensor adjustment, the LED blinks at the cycle of 100msec.

Kinds of JAM, error	LED display
Sensor adjustment upper limit error	Document remain LED turns OFF. Ready LED blinks at the cycle of 100msec.
Sensor adjustment lower limit error	Document remain LED blinks at the cycle of 100msec. Ready LED turns OFF

\* This mode can be adjusted with SIM 53-2.

**i. Paper exit sensor adjustment mode**

Set the DIP switch (3, 4, 5 to ON, 1, 2 to OFF) and press the push switch. Each sensor adjustment is performed. At that time, the LED blinks at the cycle of 100msec.

After completion of the sensor adjustment, the LED turns ON. In case of an error in the sensor adjustment, the LED blinks at the cycle of 100msec.

Kinds of JAM, error	LED display
Sensor adjustment upper limit error	Document remain LED turns OFF. Ready LED blinks at the cycle of 100msec.

Sensor adjustment lower limit error	Document remain LED blinks at the cycle of 100msec. Ready LED turns OFF
-------------------------------------	--

\* This mode can be adjusted with SIM 53-2.

**(4) Kinds of error (RADF single mode only)**

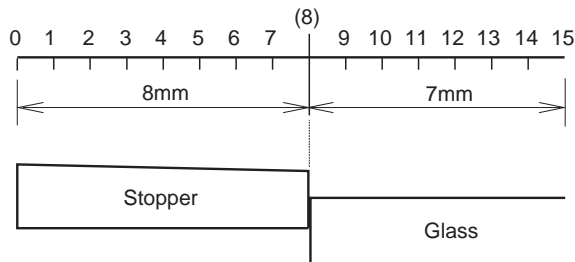
Kinds of JAM, error	LED display
Not-reaching/remaining JAM in the paper feed section	Document remain LED blinks at the cycle of 1000msec.
Not-reaching/remaining JAM in the paper exit section	Ready LED blinks at the cycle of 1000msec.
Paper feed motor lock error	Document remain LED blinks at the cycle of 2000msec.
Resist/timing sensor adjustment error (when power is supplied)	Document remain LED blinks at the cycle of 100msec.
Paper exit sensor adjustment error (when power is supplied)	Ready LED blinks at the cycle of 100msec.

A JAM/motor lock error can be canceled by opening/closing the ADF after jam recovery process or by applying the power again.

## J. RADF (AR-RF2)

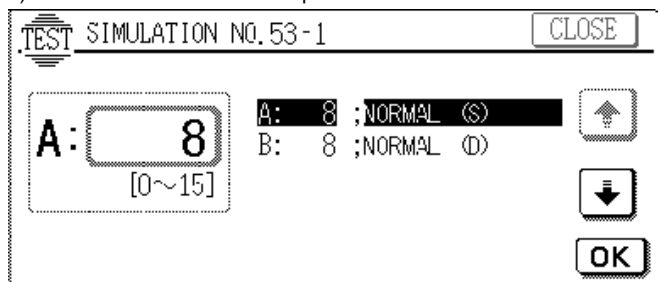
### (1) Document lead edge stop position adjustment

- The ADF document lead edge stop position is adjusted by using SIM 53.
- When shipping, the lead edge is set to (8). An adjustment may be required depending on documents.  
The adjustment range is 8mm (8 steps) in the stopper side and 7mm (7 steps) in the glass side. (1mm: 1 step) For each mode of single, and duplex, the adjustment value can be set independently.



Viewed from the operator

- Execute SIM 53-1 on the copier.



- Enter the stop position adjustment value in each mode.

[Explanation of abbreviation]

NORMAL (S):

Single, normal paper stop position adjustment

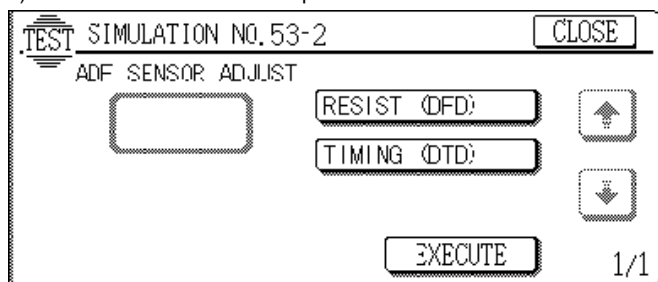
NORMAL (D):

Duplex, normal paper stop position adjustment

08: $\pm 0.0000$ mm (Initial value)	00: -8.000mm	09: +1.000mm
	01: -7.000mm	10: +2.000mm
	02: -6.000mm	11: +3.000mm
	03: -5.000mm	12: +4.000mm
	04: -8.000mm	13: +5.000mm
	05: -8.000mm	14: +6.000mm
	06: -8.000mm	15: +7.000mm
	07: -8.000mm	

### (2) Resist/timing/paper exit sensor adjustment

- Execute SIM 53-2 on the copier



- Select each sensor and press the EXECUTE key, and the adjustment will be performed automatically.

RESIST (DFD): Resist sensor

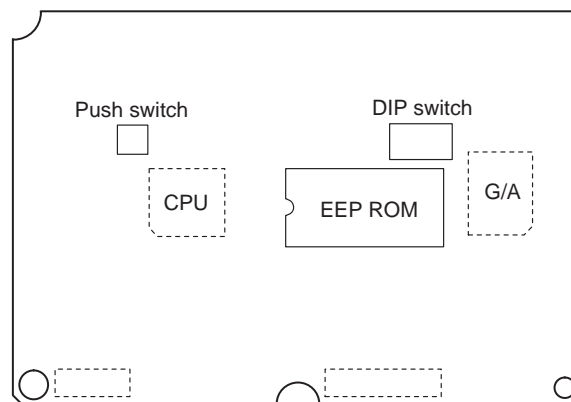
TIMING (DTD): Timing sensor

REVERSE (RDD): Reverse sensor

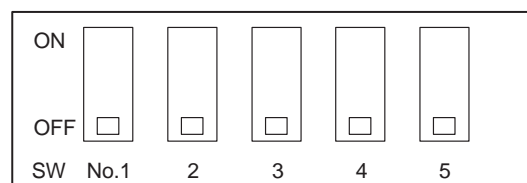
### (3) Test mode with DIP switch

The RADF (ADF) single unit operation can be checked with the DIP switch on the control PWB shown below.

(Control PWB)

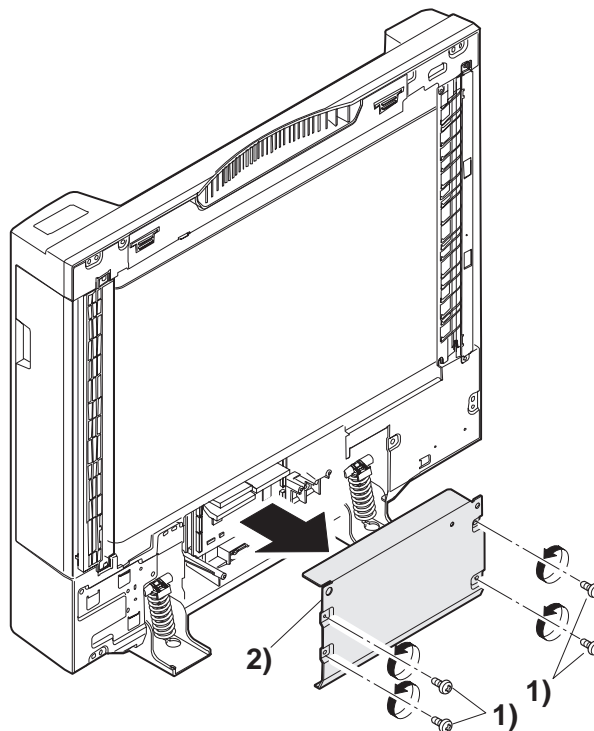


(DIP switch)

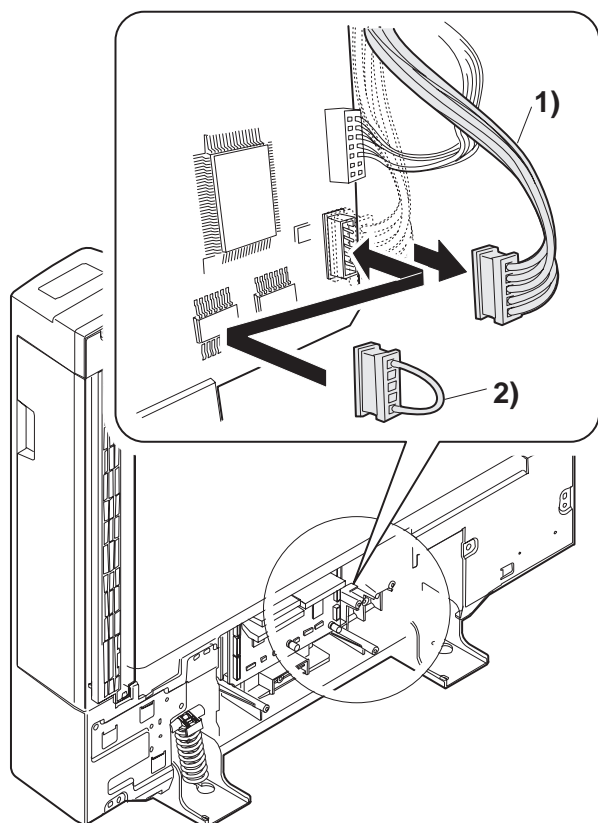


(Operating procedure)

- Remove the control PWB cover.



- 2) Disconnect the connector from the CN9 on the control PWB, and connect the short connector (OCW4074K526//) instead.



- 3) Remove the ADF/RADF top cover, and set the DIP switch on the control PWB to the desired test mode. While pressing the push switch ON, turn on the power of the machine.

(With the above operation, the machine enters the test mode.)

- 4) Turn on the push switch on the control PWB.

(Test operation is started.)

(To switch to another test mode, set the DIP switch on the control PWB to the desired test mode, and open/close the ADF/RADF paper feed section cover (microswitch FGOD is turned OFF and ON).

- DIP switch 3 meaning

	ON	OFF
DIP switch 3	For AB series	For inch series

- Kinds of test modes and setting of DIP switch

No.	Test mode name	DIP switch
a	Single paper pass mode	All OFF
b	Duplex paper pass mode	1 ON, the others OFF
c	Single aging mode	1, 3 ON, 2, 4, 5 OFF
d	Duplex aging mode	4 ON, the others OFF
e	Load check mode	1, 5 ON, 2, 3, 4, OFF
f	EEPROM initializing mode + all sensors adjustment mode	3, 5 ON, 1, 2, 4, OFF
g	Resist sensor adjustment mode	4, 5 ON, 1, 2, 3, OFF
h	Timing sensor adjustment mode	1, 4, 5, ON, 2, 3, OFF
i	Paper exit sensor adjustment mode (AR-RF1 only)	3, 4, 5, ON, 1, 2, OFF

#### a. Single paper pass mode (with paper)

When documents are set on the paper feed tray, the document feed LED lights up. When the push switch is pressed, all documents on the paper feed tray are fed.

#### b. Duplex paper pass mode (with paper)

When documents are set on the paper feed tray, the document feed LED lights up. When the push switch is pressed, all documents on the paper feed tray are fed.

#### c. Single aging mode (without paper)

When the push switch is pressed, aging is started. The operation timing is made by detection of each document size on the tray.

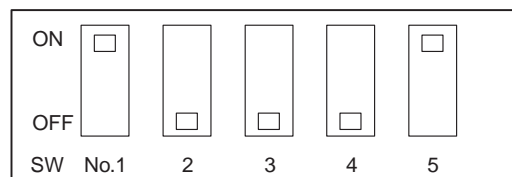
#### d. Duplex aging mode (without paper)

When the push switch is pressed, aging is started. The operation timing is made by detection of each document size on the tray.

#### e. Load check mode

Set the DIP switch on the contro PWB as shown below, and open and close the ADF/ RADF paper feed section cover to enter the load check mode.

(DIP switch)



Every time when the push switch is pressed, the operation is performed in the sequence of 1) ~ 21)

- Document feed LED ON, Document remain LED ON, Paper feed solenoid ON
- Reverse solenoid ON, Paper feed solenoid OFF
- Document feed LED OFF, Document remain LED OFF, Reverse solenoid OFF
- Document feed LED ON, Document remain LED OFF, Paper feed solenoid ON, Paper feed motor forward rotation 450mm/s (Preliminary paper feed operation)
- Document feed LED OFF, Document remain LED OFF, Paper feed solenoid OFF, Paper feed motor OFF
- Document feed LED ON, Document remain LED ON, Paper feed motor reverse rotation 450mm/2 (2-step advanced feed)
- Document feed LED OFF, Document remain LED OFF, Paper feed motor OFF
- Document feed LED ON, Document remain LED ON, Paper feed motor reverse rotation 850mm/s (Paper feed operation)
- Document feed LED OFF, Document remain LED OFF, Paper feed motor OFF
- Document feed LED ON, Document remain LED ON, Transport motor forward rotation 867mm/s
- Document feed LED OFF, Document remain LED OFF, Transport motor OFF
- Document feed LED ON, Document remain LED ON, Transport motor reverse rotation 867mm/s
- Document feed LED OFF, Document remain LED OFF, Transport motor OFF
- Document feed LED ON, Document remain LED ON, Reverse motor forward rotation 867mm/s (reverse operatoin)
- Document feed LED OFF, Document remain LED OFF, Reverse motor OFF
- Document feed LED ON, Document remain LED ON, Reverse motor forward rotation 867mm/s (Pulling/paper exit operation)



- 17) Reverse motor speed reduction 867 → 297mm/s (Paper exit speed reduction)
- 18) Document feed LED OFF, Document remain LED OFF, Reverse motor OFF
- 19) Document feed LED ON, Document remain LED ON, Reverse motor forward rotation 867mm/s (Paper exit operation)
- 20) Reverse motor speed reduction 867 → 297mm/s (Paper exit speed reduction)
- 21) Document feed LED OFF, Document remain LED OFF, Reverse motor OFF

Kind of JAM, error	LED display
Paper feed motor lock error	REMOVE ORIGINAL LED blinks at the cycle of 2000msec.

Return to 1).

#### f. EEPROM initializing + all sensors adjustment mode

When the DIP switch is set (3, 5 to ON, 1, 2, 4 to OFF) the push switch is pressed, the EEPROM is initialized. At that time, the LED blinks at the cycle of 100msec.

After completion of EEPROM initializing, the LED turns ON. In case of an error in the EEPROM initializing, the LED blinks at the cycle of 2000msec.

Then all sensors adjustment is started. At that time, the document remain LED blinks at the cycle of 100msec. After completion of all sensors adjustment, the document remain LED turns ON. In case of an. Error in the all sensors adjustment, the document remain LED blinks at the cycle of 2000msec.

\* Only when the EEPROM is successfully completed, the all sensors adjustment is performed.

Kinds of JAM, error	LED display
EEPROM initializing error	Ready LED blinks at the cycle of 2000msec.
All sensors adjustment error	Document remain LED blinks at the cycle of 2000msec

#### g. Resist sensor adjustment mode

Set the DIP switch (4, 5 to ON, 1, 2, 3 to OFF) and press the push switch. Each sensor adjustment is performed. At that time, the LED blinks at the cycle of 100msec.

After completion of the sensor adjustment, the LED turns ON. In case of an error in the sensor adjustment, the LED blinks at the cycle of 100msec.

Kinds of JAM, error	LED display
Sensor adjustment upper limit error	Document remain LED turns OFF. Ready LED blinks at the cycle of 100msec.
Sensor adjustment lower limit error	Document remain LED blinks at the cycle of 100msec. Ready LED turns OFF

\* This mode can be adjusted with SIM 53-2.

#### h. Timing sensor adjustment mode

Set the DIP switch (1, 4, 5 to ON, 2, 3 to OFF) and press the push switch. Each sensor adjustment is performed. At that time, the LED blinks at the cycle of 100msec.

After completion of the sensor adjustment, the LED turns ON. In case of an error in the sensor adjustment, the LED blinks at the cycle of 100msec.

Kinds of JAM, error	LED display
Sensor adjustment upper limit error	Document remain LED turns OFF. Ready LED blinks at the cycle of 100msec.
Sensor adjustment lower limit error	Document remain LED blinks at the cycle of 100msec. Ready LED turns OFF

\* This mode can be adjusted with SIM 53-2.

#### i. Paper exit sensor adjustment mode

Set the DIP switch (3, 4, 5 to ON, 1, 2 to OFF) and press the push switch. Each sensor adjustment is performed. At that time, the LED blinks at the cycle of 100msec.

After completion of the sensor adjustment, the LED turns ON. In case of an error in the sensor adjustment, the LED blinks at the cycle of 100msec.

Kinds of JAM, error	LED display
Sensor adjustment upper limit error	Document remain LED turns OFF. Ready LED blinks at the cycle of 100msec.
Sensor adjustment lower limit error	Document remain LED blinks at the cycle of 100msec. Ready LED turns OFF

\* This mode can be adjusted with SIM 53-2.

#### (4) Kinds of error (RADF single mode only)

Kinds of JAM, error	LED display
Not-reaching/remaining JAM in the paper feed section	Document remain LED blinks at the cycle of 1000msec.
Not-reaching/remaining JAM in the paper exit section	Ready LED blinks at the cycle of 1000msec.
Paper feed motor lock error	Document remain LED blinks at the cycle of 2000msec.
Resist/timing sensor adjustment error (when power is supplied)	Document remain LED blinks at the cycle of 100msec.
Paper exit sensor adjustment error (when power is supplied)	Ready LED blinks at the cycle of 100msec.

A JAM/motor lock error can be canceled by opening/closing the ADF after jam recovery process or by applying the power again.

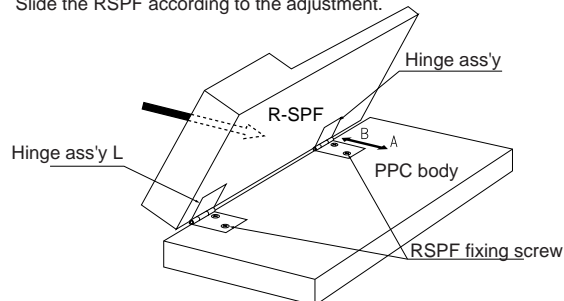
#### K. RSPF

There are following items of adjustments by the simulations of the machine.

Name	Adjustment items	Adjustment value (Key operation on the machine)	Note
Lead edge position adjustment	The lead edge and the image lead edge are adjusted in the range of +5mm to +5mm. (Front and back surface of a document)	0 ~ 100	SIM 50-1/2 SIM 50-6/7 Default: 50
Magnification ratio adjustment	The magnification ratio is corrected. (−4.9% to +4.9%)(Front and back surface of a document)	1 ~ 99	SIM 48-1 Default: 50
Resist quantity adjustment	No. 1 resist (front surface of document) loop quantity adjustment (0.1mm ~ 9.9mm)	1 ~ 99	SIM 51-2 Default: 50
	No. 2 resist (front surface of document) loop quantity adjustment (0.1mm ~ 6.9mm)	31 ~ 99	SIM 51-2 Default: 50
Image loss adjustment	The output timing of data enable signal (DEN) is adjusted and data write from the image lead edge to the set quantity is cut. (0 ~ 10mm)	0 ~ 100	SIM 50-1/2 SIM 50-6/7 Default: 50
Center shift adjustment			SIM 50-12
Reflection type sensor adjustment	Automatic initialization of the post-separation sensor, the read sensor, and the SB sensor is performed.		SIM 53-2



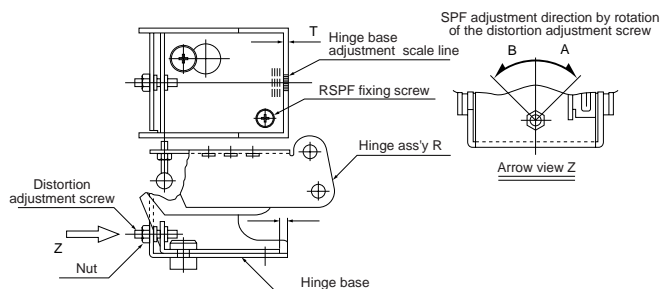
Slide the RSPF according to the adjustment.



### Image distortion adjustment procedure

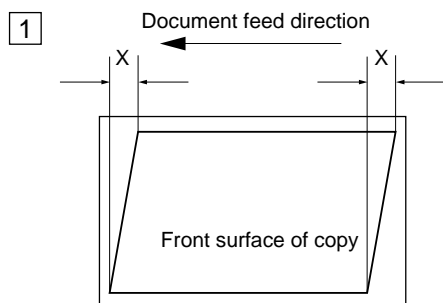
Adjustment of hinge base dimension T of hinge ass'y R

- (1) Loosen the RSPF fixing screw.
- (2) Loosen the nut and turn the distortion adjustment screw to adjust dimension T.
- (3) Tighten two SPF fixing screws to fix the hinge base.
- (4) Tighten the nut with the distortion adjustment screw fixed.
- (Adjustment 1) Turn the distortion adjustment screw in direction of A.  
— Dimension T is increased.
- (Adjustment 2) Turn the distortion adjustment screw in direction of B.  
— Dimension T is decreased.

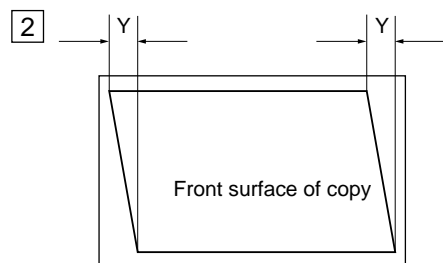


(Adjustment procedure)

- 1) Perform Adjustment 1 to adjust the distortion in X section.



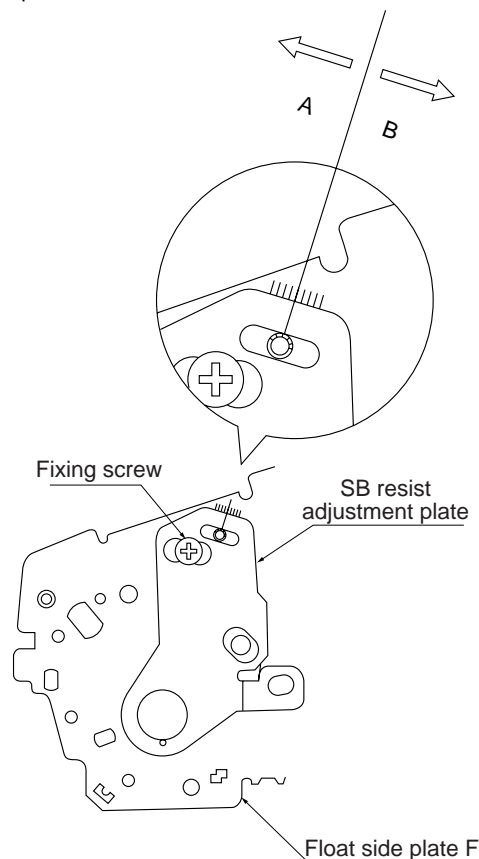
- 1) Perform Adjustment 1 to adjust the distortion in Y section.



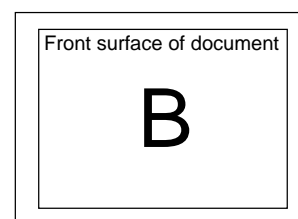
### Back surface resist adjustment

Back surface resist adjustment by the SB resist adjustment plate

- (1) Loosen the fixing screw.
  - (2) If the copied image is as shown in 1, shift and adjust the adjustment plate in the direction of A.
- If the copied image is as shown in 2, shift and adjust the adjustment plate in the direction of B.

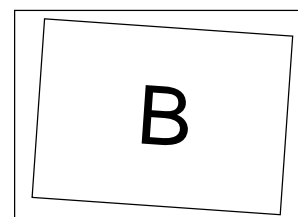


(Set document)

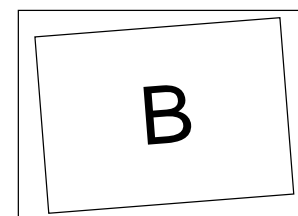


(Copy)

Copy ①



Copy ②



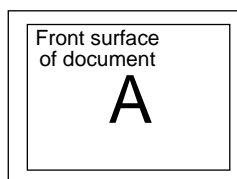
**Skew adjustment**

Skew adjustment by the upper guide and the lower guide

(1) Loosen four fixing screws.

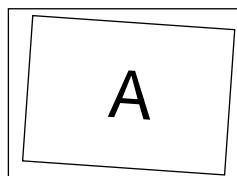
(2) If the copied image is as shown in ①, shift and adjust the adjustment plate in the direction of A. If the copied image is as shown in ②, shift and adjust the adjustment plate in the direction of B.

(Set document)

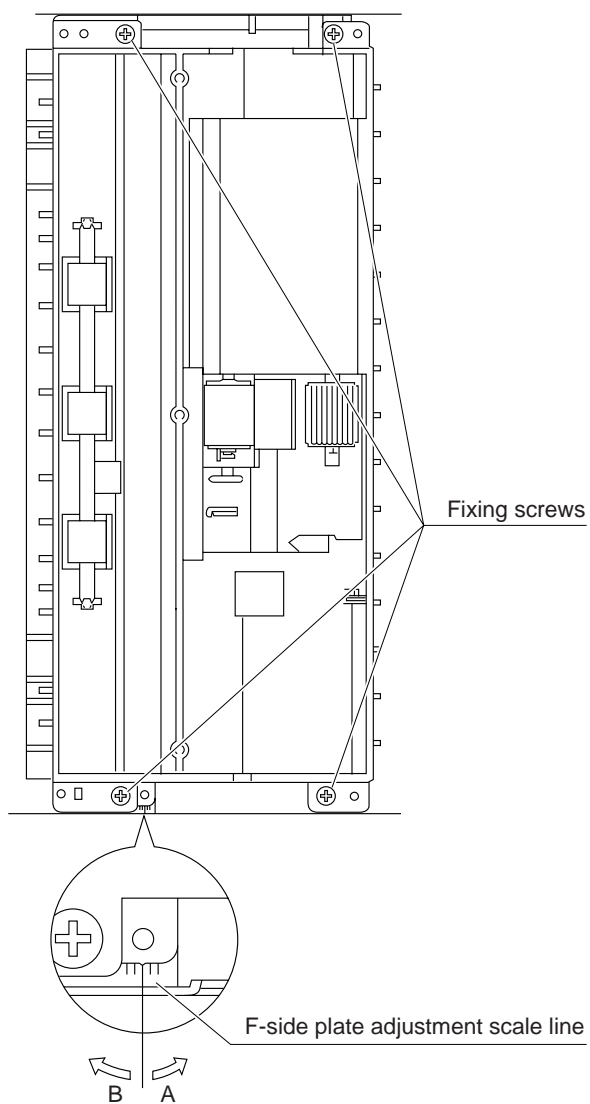
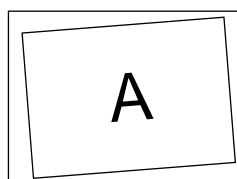


(Copy)

Copy 1



Copy 2



## [7] SIMULATION

### (Diagnostics, setting, adjustment value input, data display)

#### 1. Outline and purpose

There are following, simulation functions to check the machine operations, troubleshoot, find causes, make various settings, improve adjustment work speeds and serviceability.

- 1) Various adjustments
- 2) Specification and function setting
- 3) Trouble cancel
- 4) Operation check
- 5) Counters check, setting, clear
- 6) Machine operation conditions (operation history) data check, clear
- 7) Transmission of various data (adjustment, setting, operations, counter, etc.)

The operating procedures and displays slightly differ from the form of the machine operation panel.

The typical forms are as follows:

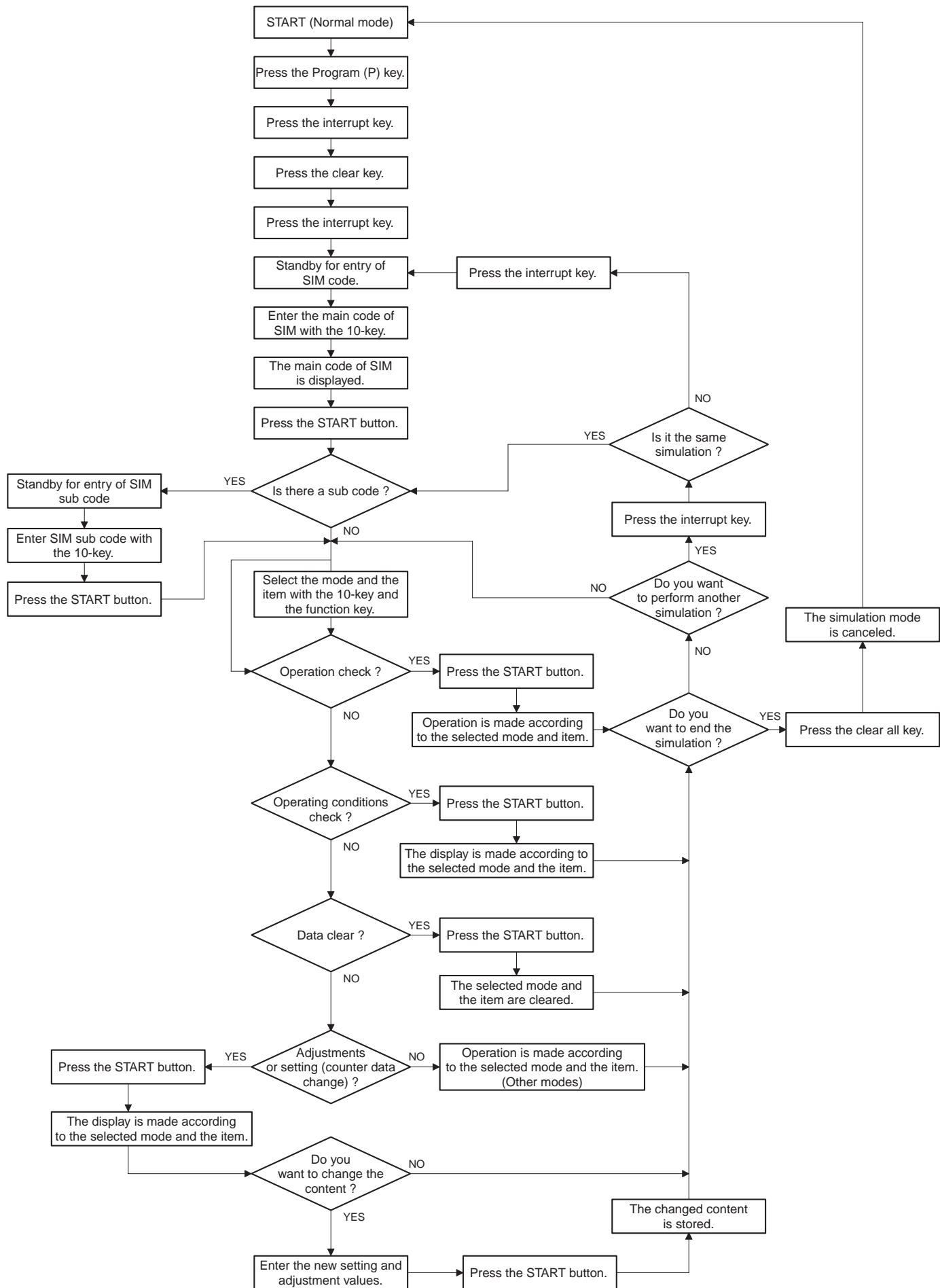
- 1) Code system: Values input and mode selection are made with the 10-key pad and various function keys.
- 2) Switch system: Simulation mode selection is made by combination of switch setting.
- 3) Values and mode selection is made with various function keys. As a special one, a jumper wire is used to connect the check points on the PWB to select the desired mode.

#### 2. Code system simulation

##### A. Operating procedures and operations

\* Entering the simulation mode

- 1) Program (P) key → Interrupt key → Clear key → Interrupt key  
(The machine enters the standby mode for the simulation main code.)
  - 2) Enter the main code with 10-key pad. → Press START key.
  - 3) Enter the sub code of with 10-keypad. → Press START key.
  - 4) Select the mode and the item with the 1-key pad and the function key.
  - 5) The machine enters the selected mode.  
To start the simulation, press the START key or the function key.  
To cancel the current simulation mode and to change the main code and the sub code, press the interrupt key.
- \* The simulation mode is canceled and the machine returns to the normal operation mode.
- 1) Press the all clear key.



## [Descriptive Conventions]

For the sake of keeping the use of information common among several models, this manual uses the following conventions:

- AR-5XX: Refers to model AR-501/505,  
 AR-4XX: Refers to model AR-405,  
 AR-2X1/3X1/4XX/250/XX6: AR-281/286/405/250/336,  
 AR-2XX, 3XX: Refers to model AR-280/285/335 for this issue.  
 \* The "X" stands for any numeral 0 to 9.

## B. List

Code		Function (Purpose)
Main	Sub	
1	1	Used to check the operation of the scanner unit and its control circuit.
	2	Used to check the operation of sensors and detectors in the scanner section and the related circuit.
2	1	Used to check the operation of the SPF/ADF/RSPF/RADF unit and its control circuit.
	2	Used to check the operation of sensors and detectors in the SPF/ADF/RSPF/RADF units and the related circuit.
	3	Used to check the operation of the loads in the SPF/ADF/RSPF/RADF units and the control circuits.
3	2	Used to check the operation of sensors and detectors in the sorter and the related circuit.
	3	Used to check the operation of the loads in the sorter and the control circuit.
	6	Used to adjust the finisher stacking capability. (Used to adjust the stop position of the finisher paper width direction alignment plate (jogger). This adjustment is made by changing the width direction alignment plate home position by the software.)
4	2	Used to check the operation of sensors and detectors in the paper feed section (desk feed, large capacity tray) and the related circuit.
	3	Used to check the operation of the loads in the paper feed section (desk paper feed, large capacity tray) and the control circuits.
5	1	Used to check the operation of the display, LCD in the operation panel, and control circuit.
	2	Used to check the operation of the heater lamp and the control circuit.
	3	Used to check the operation of the copy lamp and the control circuit.
	4	Used to check the operation of the discharge lamp and the control circuit.
	6	Used to check the operation of the separation lamp and its control circuit. (AR-501/505 only)
6	1	Used to check the operation of the loads (clutches and solenoids) in the paper transport system and the control circuit.
	2	Used to check the operation of each fan motor and its control circuit.
7	1	Used to set the aging operation conditions.
	6	Used to set the cycle of intermittent aging.
	8	Used to set YES/NO of display of the warmup time.
8	1	Used to check and adjust the operation of the developing bias voltage in each print mode and the control circuit. (for OPC drum type B)
	2	Used to check and adjust the operation of the main charger grid voltage in each print mode and the control circuit. (for OPC drum type B)
	6	Used to check and adjust the transfer charger current and the control circuit.
	7	Used to check and adjust the operation of the separation charger voltage and its control circuit.
9	1	Used to check the operation of the loads (clutches and solenoids) in the duplex section and the control circuit.
	2	Used to check the operation of sensors and detectors in the duplex section and the control circuit.
	4	Used to check the operation of the duplex unit alignment plate and its control circuit.

Code		Function (Purpose)
Main	Sub	
10	0	Used to check the operation of the toner motor and its control circuit. (Note) Do not execute this simulation with toner in the toner hopper. If executed, excessive toner may enter the developing section, causing an overtoner trouble. Be sure to remove the toner motor from the toner hopper before executing this simulation.
13	0	Used to cancel the self diag U1 trouble.
14	0	Used to cancel the self diag U1/LOC/U2/PF troubles.
15	0	Used to cancel the self diag U4 - 09/20/21/22 (large capacity tray) trouble.
16	0	Used to cancel the self diag U2 trouble.
17	0	Used to cancel copy inhibition by the host computer during the self diag PF.
21	1	Used to set the maintenance cycle.
22	1	Used to check the print out count of each section in each operation mode. (Used to check the maintenance timing.)
	2	Used to check the total numbers of misfeed and troubles. (When the number of misfeed is considerably great, it is judged as necessary for repair. The misfeed rate is obtained by dividing this count value with the total counter value.)
	3	Used to check the misfeed positions and the number of misfeed in each position. (If the number of misfeed is considerably great, it can be judged as necessary for repair.) (Sections other than ADF/RADF/SPF sections)
	4	Used to check the total trouble (self diag) history.
	5	Used to check the ROM version of each unit (section).
	6	Used to output the list of the setting and adjustment data (simulations, FAX soft switch, counters).
	7	Used to display the key operator code. (This simulation is used when the customer forgets the key operator code.)
	8	Used to check the number of use of the staple, the ADF, RADF, SPF, and scanning.
	9	Used to check the number of use of each paper feed section. (the number of prints)
	10	Used to check the system configuration (option, internal hardware).
	11	Used to check the use frequency of FAX (send/receive). (FAX model only)
	12	Used to check the misfeed positions and the number of misfeed at each position. (When the number of misfeed is considerably great, it can be judged as necessary for repair.)
24	1	Used to clear the misfeed counter, the misfeed history, the trouble counter, and the trouble history. (The counters are cleared after completion of maintenance.)
	2	Used to clear the number of use (the number of prints) of each paper feed section.
	3	Used to clear the data of the number of use of the staple, the SPF, ADF, RSPF, RADF and scanning.
	4	Used to reset the maintenance counter.
	5	Used to reset the developer quantity counter. (The developer counter of the installed developing unit is reset.)
	6	Used to reset the copy counter.
	7	Used to clear the OPC drum (membrane decrease) correction counter. (This simulation is executed when the OPC drum is replaced.)
	8	Used to clear the Zaurus print counter.

Code		Function (Purpose)
Main	Sub	
24	9	Used to clear the printer print counter. (The counter is cleared after completion of maintenance.)
	11	Used to reset the developer rotation time counter. (The developer counter of the installed developing unit is reset.) (AR-501/505 only)
25	1	Used to check the operation of the main drive (excluding the scanner section) and to check the operation of the toner concentration sensor. (The toner concentration sensor output can be monitored.)
	2	Used to make the initial setting of toner concentration when replacing developer.
	8	Used to set the timing of toner concentration control correction B and the correction quantity. The timing is determined according to the accumulated use time of developer. (AR-501/505 only)
26	1	Used to set options. (This simulation is used to make option setting when an option is installed.)
	2	1) Used to set the paper size of the large quantity paper tray. (When the paper size is changed, the lift paper size must be also changed with this simulation.) 2) Used to detect the paper or document size of 8.5" x 13" (Inch series) and set the display mode. (All paper feed modes)
	3	Used to set the specifications of the auditor. Setting must be made depending on the use condition of the auditor.
	5	Used to set the count mode of the total counter and the maintenance counter.
	6	Used to set the specifications depending on the destination.
	15	Used to set the fusing operation mode (paper curl corresponding mode).
	18	Used to set VALID/INVALID of toner save operation. (This simulation is valid only in the Japan and UK versions. (It depends on SIM 26-6 (Destination setting). For the other destinations, the same setting can be executed with the user program.)
	22	Used to set the specification (language display) for the destination. (Excluding the Japan models.)
	30	Used to set the CE mark conforming operation mode. (For flickers when driving the fusing heater lamp.)
	35	Used to set whether the trouble history display of SIM 22-4 is displayed as one trouble or as the number of continuous troubles when two or more troubles of a same kind occurred.
	36	Used to set the ICU fan operating temperature. (Operation in the pre-heat mode.) (Excluding Japan models.)
	40	Polygon motor stop mode setup (AR-501/505) Used to set the stop time of the polygon motor after leaving in ready state and to set Enable/Disable of the setting. (Other models)
	41	Used to enable/disable the auto magnification ratio select (AMS) function in the pamphlet copy mode.
	44	Used to set the model of the unit which is connected to the SCSI I/F of ICU PWB.
	50	Used to set YES/NO of black/white reversion is allowed.
27	52	Used to set whether white paper discharge count up is performed or not. ("White paper" means insertion paper in the OHP insertion paper mode (without copy), cover paper in the cover paper insertion mode (without copy)/back cover, and white paper in the duplex exit mode (CA etc.).)
	1	Used to set the operation specifications when a communication trouble occurs between the host computer and MODEM (on the copier). (When a communication trouble occurs between the host computer and MODEM (copier), the self diag display (U7-00) is printed and setting is made to select inhibit/allow of printing.)
	2	Used to set and change the host computer/MODEM numbers. (This setting is required when a communication is made between the copier and a computer through MODEM.)
	3	Used to set and change the ID numbers of the copier and the host computer/MODEM numbers. (This setting is required when a communication is made between the copier and a computer through MODEM.)

Code		Function (Purpose)
Main	Sub	
27	4	Used to enter the start time and the end time of servicing for management of service work. (The data can be checked by the host computer.)
	5	Used to enter the TAG No. of the copier. (This simulation allows to check the machine TAG No. with the host computer.)
30	1	Used to check the operation of sensors and detectors in the paper feed section, the paper transport section, and the paper exit section, and the related circuit.
	2	Used to check the operation of sensors and detectors in the paper feed section and the related circuits. (The operations of sensors and detectors in the paper feed section can be monitored with the LCD.)
40	1	Used to check the operation of the manual paper feed tray paper size detector and the related circuit. (The operation of the manual paper feed tray paper size detector can be monitored with the LCD.)
	2	Used to adjust the manual paper feed tray paper width detector detection level.
41	1	Used to check the operation of the document size sensor and the related circuit. (The operation of the document size sensor can be monitored with the LCD.)
	2	Used to adjust the document size sensor detection level.
	3	Used to check the operation of the document size sensor and the related circuit. (The document size sensor output level can be monitored with the LCD.)
43	1	Used to set the fusing temperature in each operation mode.
	3	Used to adjust the fusing motor speed. (AR-501/505 only)
	8	Used to set the time to rotate the fusing motor after reaching the set temperature in warming up. (AR-501/505 only)
44	1	Used to set whether the correction functions of the image forming (process) section are valid or not.
	2	Used to adjust the sensitivity (gain) of the OPC drum mark sensor and the image density sensor.
	4	Used to set the target image (reference) density level in the developing bias voltage correction.
	5	Used to set various parameters (main charger grid voltage, laser beam power, correction start developing bias voltage) in developing bias correction.
	9	Used to check the data on the result of the image forming section correction (process correction) (the corrected main charger grid voltage in each print mode, developing bias voltage, the laser power, etc.) (This simulation allows to check whether the correction is executed properly or not.)
46	12	Used to check the toner image patch density data in correction operation of the image forming section. (This simulation allows to check whether the correction is executed properly or not.)
	15	Used to set the correction values of various parameters (maincharger grid voltage, laser beam power, developing bias voltage) in the image forming operation and image forming section correction for OPC drum type A. (AR-250/280/281/285/286/335/336/405 only)
	2	Used to adjust the copy density in the copy mode (binary/multi-value - auto, character and photo, photo mode). (The overall print density in each mode (all of the specified density set for each density level (display value)) can be adjusted in each mode.)
	3	Used to adjust the copy density in the copy mode (multi value-auto, character and photo, photo mode). (The overall print density in each mode (all of the specified density set for each density level (display value)) can be adjusted in each mode.) (AR-250/280/285/330/335 only)
	5	Used to adjust the print density for each density level (display value) in the copy mode (multi character mode). An arbitrary print density can be set for each density level (display value). (AR-250/280/285/330/335 only)
	6	Used to adjust the print density for each density level (display value) in the copy mode (multi value-character, photo mode). An arbitrary print density can be set for each density level (display value). (AR-250/280/285/330/335 only)

Code		Function (Purpose)
Main	Sub	
46	7	Used to adjust the print density for each density level (display value) in the copy mode (multi value - photo mode). (Japan only)
	9	Used to adjust the print density for each density level (display value) in the copy mode (binary - character mode).
46	10	Used to adjust the print density for each density level (display value) in the copy mode (binary - character, photo mode). An arbitrary print density can be set for each density level (display value).
	11	Used to adjust the print density for each density level (display value) in the copy mode (binary - photo mode). An arbitrary print density can be set for each density level (display value).
	17	Used to execute shading correction and display the correction value.
	18	Used to adjust $\gamma$ (density gradient) in each copy mode. (Target models: AR-2X1/3X1/4XX/250/XX6/5XX series)
	19	Used to adjust $\gamma$ (density gradient) and set the density detection area in the auto copy mode and to set the image process mode in the photo copy mode. (Target models: AR-2X1/3X1/4XX/250/XX6/5XX series)
	20	Used to adjust the copy density correction in the SPF (RSPF) copy mode for the document table copy mode. Adjustment is made so that the copy density is the same as that in the document table copy mode. (Target models: AR-2X1/3X1/4XX/250/XX6/5XX series)
48	1	Used to adjust the copy magnification ratio (main scanning direction, sub scanning direction).
50	1	Used to adjust the copy image position and the void area (image loss) on the print paper in the copy mode. (The same adjustment can be made with SIM 50-2 (simple method).)
	2	Used to adjust the copy image position and the void area (image loss) on the print paper in the copy mode. (Simple adjustment) (This simulation allows the same simulation with SIM 50-1 more simply. )
	5	Used to adjust the print image position (top margin) on the print paper in the print mode.
	6	Used to adjust the copy lead edge. (RSPF)
	7	Used to adjust the copy lead edge (simple method). (RSPF)
	10	Used to adjust the print image center position. (Adjustment can be made for each paper feed section.)
	12	Used to adjust the print image center position. (Adjustment can be made for each document mode.)
	26	Used to set the folding margin of center binding.
51	1	Used to adjust the OPC drum separation pawl ON timing.
	2	Used to adjust the contact pressure of paper onto the resist roller in each section (copier paper feed section, duplex paper feed section, SPF paper feed section). (When the print image position varies greatly for the paper or when a lot of paper jam troubles occur, the adjustment is required.)
	8	Used to set Enable/Disable of the drum separation pawl drive solenoid (PSPS) operation for each paper feed section. (AR-501/505 only)
52	1	Used to adjust the duplex print mode stacking capability. (Used to adjust the stop position of the paper tray width direction alignment plate in the duplex unit. The adjustment is executed by changing the width direction alignment plate home position in the software.)
53	1	Used to adjust the document stop position in each operation mode of ADF/RADF. (Target model: AR-250/280/285/335/405)
	2	Used to adjust the optical sensor sensitivity in the ADF/RADF. (Target models: AR-250/280/285/335/405/501/505)
	6	Used to adjust the RSPF width detection level. (AR-501/505 only)
60	1	Used to check the operation (read/write) of ICU (DRAM). (SIMM MEMORY/ONBOARD MEMORY)
61	1	Used to test the operation of the scanner (exposure) unit.

Code		Function (Purpose)
Main	Sub	
61	2	Used to adjust the scanner (exposure) laser power (absolute value) in the copy mode.
	4	Used to adjust the scanner (exposure) laser power (absolute value) in the printer mode. (For Photoconductor type B)
62	1	Used to format the hard disk. (Target models: AR-250/280/285/335)(Models with the hard disk installed only)
	2	Used to check the operation (read/write) of the hard disk. (Target models: AR-250/280/285/335)(Models with the hard disk installed only.) (Partial check)
62	3	Used to check the operation (read/write) of the hard disk. (Target models: AR-250/280/285/335) (Only the models with a hard disk) (All area check)
63	1	Used to check the result of shading correction. (The shading correction data are displayed.)
	7	Used to adjust the white plate scanning start position in the shading white correction. (AR-501/505 only)
64	1	Used to check the operation of the printer function (auto print operation). (Print pattern, paper feed mode, print mode, the number of sheets, and the density can be set to an arbitrary value.)
65	1	Used to adjust the touch panel (LCD display) detecting position.
	2	Used to check the result of the touch panel (LCD display) detecting position adjustment. (The coordinates are displayed.)
67	1	Used to check the printer PWB memory operation (read/write). (When replacing the PWB with a new one, this check must be performed.)
	2	Used to check the printer parallel I/F operation. (This simulation is used only for production, and a special tool is required. Not available in the market.)
	3	Used to adjust the printer parallel I/F ACK signal width.
	11	Used to set YES/NO of the printer parallel I/F SELECT IN signal.
	12	Used to write data into the printer flash memory.
	13	Used to check the printer flash memory data.
	14	Used to check the printer flash memory data writing and its result.
	15	Used to check the sum of the printer flash memory.
68	1	Used to check the operation of infrared communication I/F (Zaurus link) and the related circuit. (Target models: AR-F230/S280/F280S/F280R/S330)(Japan models only)
	1	Used to check the input/output by connecting channels A and B of SCSI with the SCSI cable. (AR-501/505 only)

## C. Details of simulations

1

<b>1 - 1</b>	
Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the scanner unit and its control circuit.
Section	Optical (Image scanning)
Item	Operation
Operation/ Procedure	1. Select the copy (scanning) magnification ratio with the zoom key.

The magnification ratio can be increased or decreased with the [ZOOM] key by the increment of 1%.

The selected magnification ratio is displayed on the magnification ratio display.

### 2. Press the [EXECUTE] key.

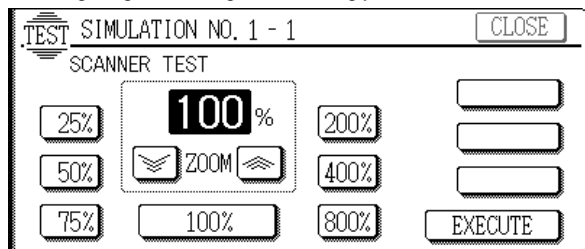
Scanning is performed at the magnification ratio set in procedure 1 is executed. During scanning, the [EXECUTE] key is highlighted.

If the [EXECUTE] key is pressed under this state, the operation is interrupted. After completion of scanning, the [EXECUTE] key returns to the normal display.

To resume scanning, start with procedure 2.

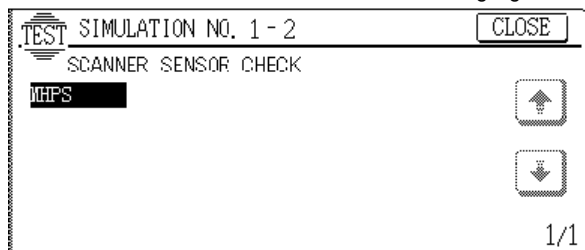
To change the magnification ratio, start with procedure 1.

Scanning is performed at the max. scanning length (432mm). If, however, the magnification ratio is set to greater than 100%, the scanning length is changed accordingly.



1 - 2

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of sensors and detectors in the scanner section and the related circuit.
Section	Optical (Image scanning)
Item	Operation
Operation/ Procedure	The operations of sensors and detectors in the scanner section are displayed. The active sensors and detectors are highlighted.



2

2 - 1

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the RADF unit and its control circuit.
Section	SPF/ADF/RSPF/RADF
Item	Operation
Operation/ Procedure	1. Select the aging mode with the key.

When selection is made, the selected item is highlighted.

[1:SIDE]: Single copy aging mode

[2:SIDE] Duplex copy aging mode

(Note) [2:SIDE] is displayed only when the unit which allows duplex copy is installed.

### 2. Select the copy magnification ratio with the key.

(The magnification ratio can be increased or decreased in the increment of 1% with the [ZOOM] key.)

The selected magnification ratio is displayed on the magnification ratio display on the screen.

The magnification ratio can be set only when SPF is installed.

### 3. Press the [EXECUTE] key.

Aging of the document feeder is executed under the conditions specified with procedures 1 and 2.

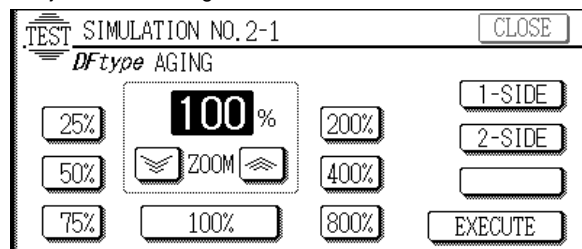
During aging, the [EXECUTE] key is highlighted. If the [EXECUTE] key is pressed while it is highlighted, the operation is interrupted.

When two or more operations are selected in procedure 1, "1:SIDE" (single copy aging mode) is unconditionally performed and the other highlighted displays return to the normal display.

To resume aging, execute with procedure 3.

To change the conditions for aging, execute with procedure 1.

\* When the SPF is installed, the magnification ratio can be adjusted in the range of 64% - 200%.



2 - 2

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of sensors and detectors in the RADF units and the related circuit.
Section	SPF/ADF/RSPF/RADF
Item	Operation
Operation/ Procedure	The operations of sensors and detectors in the RADF/ADF/SPF section are displayed. The active sensors and detectors are highlighted.

### [ADF/RADF installed]

DSS	Empty sensor	Normal display: Document empty	Highlighted display: Document exist
DFD	Resist sensor	Normal display: Document empty	Highlighted display: Document exist
DTD	Paper timing sensor	Normal display: Document empty	Highlighted display: Document exist



AUOD	DF open/close sensor	Normal display: Close	Highlighted display: Open
TSS1	Tray feed size sensor (large size)	Normal display: Document empty	Highlighted display: Document exist
TSS2	Tray feed size sensor (small size)	Normal display: Document empty	Highlighted display: Document exist
DWS1	Tray width sensor (182mm)	Normal display: OFF	Highlighted display: ON
DWS2	Tray width sensor (210mm/215.9mm)	Normal display: OFF	Highlighted display: ON
DWS3	Tray width sensor (257mm)	Normal display: OFF	Highlighted display: ON
DWS4	Tray width sensor (279.4mm)	Normal display: OFF	Highlighted display: ON
DWS5	Tray width sensor (297mm)	Normal display: OFF	Highlighted display: ON
RDD	Paper exit sensor	Normal display: OFF	Highlighted display: ON

**[SPF installed]**

DSS empty sensor	Normal display: Document empty	Highlighted display: Document exist
DFD resist sensor	Normal display: Document empty	Highlighted display: Document exist
RDD paper exit sensor	Normal display: Document empty	Highlighted display: Document exist
AUOD DF open/close sensor	Normal display: Close	Highlighted display: Open
TSS1 tray feed size sensor (large size)	Normal display: Document empty	Highlighted display: Document exist
TSS2 tray feed size sensor (small size)	Normal display: Document empty	Highlighted display: Document exist
DWS1 tray width sensor (182mm)	Normal display: OFF	Highlighted display: ON
DWS2 tray width sensor (210mm/215.9mm)	Normal display: OFF	Highlighted display: ON
DWS3 tray width sensor (257mm)	Normal display: OFF	Highlighted display: ON
DWS4 tray width sensor (279.4mm)	Normal display: OFF	Highlighted display: ON
DWS5 tray width sensor (297mm)	Normal display: OFF	Highlighted display: ON

**[RSPF installed]**

EMP	Empty sensor	Normal display: Document empty	Highlighted display: Document exist
BUNRIS	Post-separation sensor	Normal display: Document empty	Highlighted display: Document exist
RDS	Read sensor	Normal display: Document empty	Highlighted display: Document exist
RDD	Paper exit sensor	Normal display: Document empty	Highlighted display: Document exist
SBS	Switch-back sensor	Normal display: Document empty	Highlighted display: Document exist
REGS	Resist sensor	Normal display: Document empty	Highlighted display: Document exist
AUOD	DF open/close sensor	Normal display: Close	Highlighted display: Open
FGOD	Paper feed cover sensor	Normal display: Close	Highlighted display: Open
TSS1	Tray feed size sensor (large size)	Normal display: Document empty	Highlighted display: Document exist
TSS2	Tray feed size sensor (small size)	Normal display: Document empty	Highlighted display: Document exist

DWS1	Tray width sensor (182mm)	Normal display: OFF	Highlighted display: ON
DWS2	Tray width sensor (210mm/8.5")	Normal display: OFF	Highlighted display: ON
DWS3	Tray width sensor (257mm)	Normal display: OFF	Highlighted display: ON
DWS4	Tray width sensor (17")	Normal display: OFF	Highlighted display: ON
DWS5	Tray width sensor (297mm)	Normal display: OFF	Highlighted display: ON

TEST

SIMULATION NO. 2 - 2

CLOSE

DFtype SENSOR CHECK

DSS	DFD	DTD	RDD
AUOD	FGOD	TGOD	DWS1
DWS2	DWS3	DWS4	DLS1
DLS2	DLS3	DWS	

↑

↓

1/1

**2 - 3**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the loads in the RADF/ADF/SPF units and the control circuits.
Section	SPF/ADF/RSPF/RADF
Item	Operation
Operation/Procedure	1. The names of the loads which can be operated are displayed. Select the load to be checked with the key, and the selected load is highlighted.

## 2. Press the [EXECUTE] key.

The load selected in procedure 1 starts the operation. During the operation of the load, the [EXECUTE] key is highlighted. If the EXECUTE key is pressed while it is highlighted, the operation is stopped.

When two or more operations are selected in procedure 1, the operation is performed in the sequence of display order.

**[When ADF/RADF is installed]**

DFM FORWARD	Paper feed motor forward rotation
DFM REVERSE	Paper feed motor reverse rotation
DTM FORWARD	Transport motor forward rotation
DTM REVERSE	Transport motor reverse rotation
DRM	Paper expulsion motor
DFSOL	Paper feed solenoid

**[When SPF is installed]**

DTM FORWARD	Transport motor forward rotation
DTM REVERSE	Transport motor reverse rotation
STAMP SOL	Stamp solenoid

**[When RSPF is installed]**

DFM FORWARD (L)	Paper feed motor forward rotation (230mm/sec)
DFM REVERSE (L)	Paper feed motor reverse rotation (360mm/sec)
DFM FORWARD (H)	Paper feed motor forward rotation (450mm/sec)
DFM REVERSE (H)	Paper feed motor reverse rotation (450mm/sec)
DTM	Transport pulse motor
DFC	Paper feed clutch
FSOL1	Flapper solenoid 1
FSOL2	Flapper solenoid 2
SBSOL	Switchback pressure solenoid

**TEST SIMULATION NO.2-3** CLOSE

DF type OUTPUT CHECK

DFM FORWARD DFM REVERSE

DTM FORWARD DTM REVERSE

DRM DFSOL

EXECUTE 1/2

**TEST SIMULATION NO.2-3** CLOSE

DF type OUTPUT CHECK

DRSOL

EXECUTE 2/2

## 3

## 3 - 2

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of sensors and detectors in the sorter and the related circuit.
Section	Sorter/Finisher
Item	Operation
Operation/Procedure	The display differs depending on the unit (sorter, finisher) installed. The operations of the sensors and detectors in the sorter and the finisher section are displayed. The active sensors and detectors are highlighted.

## In the case of AR-SS1

PIS	Paper entry port sensor
PSFT	Paper empty sensor
THLS	Upper limit sensor
TLLS	Lower limit sensor
THPS	Bin home sensor
PSFT0	Take-out position sensor
SPHPS	Alignment rod home sensor
CHPS	Holder home sensor
SHPSW	Stapler home switch
PSFSU	Stapler paper sensor
SSFSU	Stapler empty sensor
SSSW	Joint section door sensor
SCSW	Staple unit section door sensor

**TEST SIMULATION NO.3-2** CLOSE

SORTER SENSOR CHECK

PIS PSFT THLS TLLS

THPS PSFT0 SPHPS CHPS

SHPSW PSFSU SSFSU SSSW

SCSW

EXECUTE 1/1

## In the case of AR-FN1

JGHP	Jogger motor home sensor
READY	Stapler self priming sensor
PSHP	Pusher motor home sensor
STUHP	Staple unit home sensor
T2PF	Tray 2 paper full sensor
STND	Stapler replacement sensor

EVRE	Elevator motor encoder
OFHP	Offset home sensor
STHP	Staple home sensor
INPD	Paper entry sensor
RVPD	Reverse paper exit sensor
PGOP	Upper transport PG open/close sensor
PFD1	Transport sensor 1
PFD2	Transport sensor 2
PFD3	Transport sensor 3
PFD4	Transport sensor 4
T3OD	Tray 3 paper exit sensor
STID	Staple tray paper entry sensor
STPD	Staple paper sensor
T1PF	Tray 1 paper full sensor
T3UP	Tray 3 upper limit sensor
T3DN	Tray 3 lower limit sensor
LSTS	Stapler sensor
NCTS	Staple cartridge sensor
PWD	Power off detection
DSW1	Copier connection detection
DSW2	Top door open/close detection
DSW3	Front door open/close detection

**TEST SIMULATION NO.3-2** CLOSE

FINISHER SENSOR CHECK

JGHP READY PSHP STUHP

T2PF STND EVRE OFHP

STHP INPD RVPD PGOP

PFD1 PFD2 PFD3 PFD4

T3OD STID STPD T1PF

EXECUTE 1/2

**TEST SIMULATION NO.3-2** CLOSE

FINISHER SENSOR CHECK

T3UP T3DN LSTS NCTS

PWD DSW1 DSW2 DSW3

EXECUTE 2/2

## In the case of AR-FN2/FN3

JGHP	Jogger motor home sensor
READY	Stapler self priming sensor
PSHP	Pusher motor home sensor
STORHP	ST paper exit roller pressure release clutch home sensor
STUHP	Staple unit home sensor
T2PF	Tray 2 paper full sensor
STND	Stapler replacement sensor
EVRE	Elevator motor encoder
OFHP	Offset home sensor
STHP	Staple home sensor
INPD	Paper entry sensor
T3PDHP	Tray 3 paper exit roller paddler home sensor
PFD2	Transport sensor 2
PFD3	Transport sensor 3
PFD4	Transport sensor 4
T3OD	Tray 3 paper exit sensor
STID	Staple tray paper entry sensor
STPD	Staple paper sensor
T1PF	Tray 1 paper full sensor
STID2	Staple tray paper-in sensor
T3UP	Tray 3 upper limit sensor

T3DN	Tray 3 lower limit sensor
LSTS	Stapler sensor
NCTS	Staple cartridge sensor
PWD	Power off detection
DSW1	Copier connection detection
DSW2	Top door open/close detection
DSW3	Front door open/close detection

TEST SIMULATION NO.3-2 CLOSE

FINISHER SENSOR CHECK

JGHP	READY	PSHP	STORHP	↑
STUHP	T2PF	STND	EVRE	
OFHP	STHP	INPD	T3PDHP	↓
PFD2	PFD3	PFD4	T3OD	
STID	STPD	T1PF	STID2	1/2

TEST SIMULATION NO.3-2 CLOSE

FINISHER SENSOR CHECK

T3UP	T3DN	LSTS	NCTS	↑
PWD	DSW1	DSW2	DSW3	↓

2/2

### 3 - 3

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the loads in the sorter and the control circuit.
Section	Sorter/Finisher
Item	Operation
Operation/Procedure	The display differs depending on the unit (sorter, finisher) which is installed.

- The names of the loads which can be operated are displayed. The selected load is highlighted.
- Press the [EXECUTE] key, and the selected load is operated. During the operation of the load, the [EXECUTE] key is highlighted. If the [EXECUTE] key is pressed when it is highlighted, the operation is interrupted.

#### In the case of AR-SS1

DTM	Transport motor
DCM	Holder motor
BZ	Buzzer
TMM	Bin shift motor
DSM	Alignment motor
SAM	Stapler drive motor

TEST SIMULATION NO.3-3 CLOSE

SORTER OUTPUT CHECK

DTM	DCM	BZ	TMM	↑
DSM	SAM			↓

EXECUTE 1/1

#### In the case of AR-FN1

PSM	Pusher motor
JGM	Jogger motor
STUM	Staple unit shift motor
FML	Main drive motor low transport speed

FMH	Main drive motor high transport speed
RVM	Reverse motor
EVM	Elevator motor
OFM	Offset motor
INGSL	Paper entry gate solenoid
T3UPSL	Tray 3 upper limit solenoid
OG1SL	Paper exit gate 1 solenoid
OG2SL	Paper exit gate 2 solenoid
OG3SL	Paper exit gate 3 solenoid
RRSL	Reverse roller pressure release solenoid
SPSL	Short path select solenoid
STSL	ST paper holding solenoid
T12CL	Tray 1 and tray 2 speed reduction clutch
PDCL	Paddler clutch
STOPCL	ST paper exit roller pressure clutch
T3SLCL	Tray 3 speed reduction clutch
STM	Staple motor
T3ORSL	Tray 3 normal speed clutch

TEST SIMULATION NO.3-3 CLOSE

FINISHER OUTPUT CHECK

PSM	JGM	STUM	FML	↑
FMH	RVM	EVM	OFM	↓
INGSL	T3UPSL	OG1SL	OG2SL	

EXECUTE 1/2

TEST SIMULATION NO.3-3 CLOSE

FINISHER OUTPUT CHECK

OG3SL	RRSL	SPSL	STSL	↑
T12CL	PDCL	STOPCL	WLCL	↓
STM				

EXECUTE 2/2

#### In the case of AR-FN2/FN3

PSM	Pusher motor
JGM	Jogger motor
STUM	Staple unit shift motor
FM	Main drive motor
T3OM	Tray 3 paper exit drive motor
EVM	Elevator motor
OFM	Offset motor
T3PDSL	Tray 3 paper exit paddler solenoid
STPDSL	ST paddler solenoid
OG1SL	Paper exit gate 1 solenoid
OG2SL	Paper exit gate 2 solenoid
OG3SL	Paper exit gate 3 solenoid
STSL	ST paper holding solenoid
T12CL	Tray 1 and tray 2 speed reduction clutch
PDCL	Paddler clutch
STOPCL	ST paper exit roller pressure clutch
STM	Staple motor
PPSL	Paper holding solenoid

TEST SIMULATION NO.3-3 CLOSE

FINISHER OUTPUT CHECK

PSM	JGM	STUM	FM	↑
T3OM	EVM	OFM	T3PDSL	↓
STPDSL	OG1SL	OG2SL	OG3SL	

EXECUTE 1/2

TEST SIMULATION NO.3-3 CLOSE

FINISHER OUTPUT CHECK

STSL T12CL PDCL STORCL ↑

STM PPSL ↓

EXECUTE 2/2

**3 - 6**

Purpose	Adjustment
Function (Purpose)	Used to adjust the finisher stacking capability. (Used to adjust the stop position of the finisher paper width direction alignment plate (jogger). This adjustment is made by changing the width direction alignment plate home position by the software.)
Section	Sorter/Finisher
Item	Operation
Operation/ Procedure	<ol style="list-style-type: none"> <li>1. Select B mode with [↑] and [↓] keys.</li> <li>2. Select the paper size by entering the numbers (0 or 1) with the 10-key pad.</li> <li>3. Select A mode with [↑] and [↓] keys.</li> <li>4. Enter the adjustment value with the 10-key pad.</li> <li>5. Press the [EXECUTE] key.</li> </ol> <p>The value entered in procedure 4 is set.</p> <p>The finisher's jogger starts operation. During operation, the [EXECUTE] key is highlighted.</p> <p>If the [EXECUTE] key is pressed while it is highlighted, the load operation is interrupted.</p>

TEST SIMULATION NO.3-6 CLOSE

FINISHER JOGGER ADJUSTMENT VALUE

A: 50 [45~55] A: 50 ;ADJUST VALUE

B: 0 ;(0:A4,1:LT)

EXECUTE

**4****4 - 2**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of sensors and detectors in the paper feed section (desk feed, large capacity tray) and the related circuit.
Section	Paper transport
Item	Operation
Operation/ Procedure	<p>The operating conditions of the sensors and detectors in the paper feed section are displayed.</p> <p>The active sensors and detectors are highlighted.</p>

**Desk Unit Sensor**

DDOPSW	Door open sensor
DPOD1	Paper exit transport sensor 1cs
DPOD2	Paper exit transport sensor 2 cs
DPOD3	Paper transport sensor 3cs
DLUD1	1cs Lift upper limit sensor
DPED1	1cs Paper empty sensor
DCSPD1	1cs remaining quantity detection 1
DLUD2	2xs lift upper limit sensor

DPED2	2cs paper empty sensor
DCSPD2	2cs remaining quantity detection 1
DLUD3	3cs lift upper limit sensor
DPED3	3cs paper empty sensor
DCSPD3	3cs remaining quantity detection 1
FOUND1	1cs lift unit detection (Installation detection)
FOUND2	2cs lift unit detection (Installation detection)
FOUND3	3cs lift unit detection (Installation detection)
DCSS11	1cs size detection 0
DCSS12	1cs size detection 1
DCSS13	1cs size detection 2
DCSS14	1cs size detection 3
DCSS21	2cs size detection 0
DCSS22	2cs size detection 1
DCSS23	2cs size detection 2
DCSS24	2cs size detection 3
DCSS31	3cs size detection 0
DCSS32	3cs size detection 1
DCSS33	3cs size detection 2
DCSS34	3cs size detection 3

**LCC Unit Sensor**

LRE	Remaining quantity sensor
LUD	Upper limit sensor
LDD	Lower limit sensor
LPED	Paper empty sensor
LPFD	Paper exit sensor
LDSW	Door open SW
LTOD	Body connection sensor
LCD	Cassette detection line

TEST SIMULATION NO.4-2 CLOSE

DESK LCC SENSOR CHECK

DDOPSW DPOD1 DPOD2 DPOD3 ↑

DLUD1 DPED1 DCSPD1 ↓

DLUD2 DPED2 DCSPD2

DLUD3 DPED3 DCSPD3

FOUND1 FOUND2 FOUND3 1/2

TEST SIMULATION NO.4-2 CLOSE

DESK LCC SENSOR CHECK

DCSS11 DCSS12 DCSS13 DCSS14 ↑

DCSS21 DCSS22 DCSS23 DCSS24 ↓

DCSS31 DCSS32 DCSS33 DCSS34

LRE LUD LDD LPED 2/2

LPFD LDSW LTOD LCD

**4 - 3**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the loads in the paper feed section (desk paper feed, large capacity tray) and the control circuits.
Section	Paper transport
Item	Operation
Operation/ Procedure	<ol style="list-style-type: none"> <li>1. The names of the loads which can be operated are displayed.</li> <li>Select the load to be checked with the key, and the selected load is highlighted.</li> <li>2. Press the [EXECUTE] key.</li> </ol> <p>The load selected in procedure 1 starts the operation.</p>

During the operation of the load, the [EXECUTE] key is highlighted. If the [EXECUTE] key is pressed while it is highlighted, the operation is stopped.

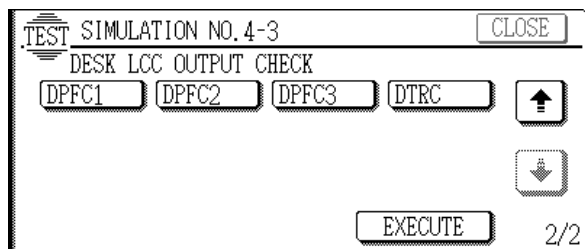
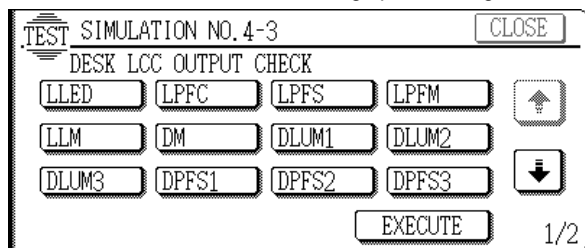
#### Desk Unit Output

DM	Transport motor
DLUM1	Lift up motor 1
DLUM2	Lift up motor 2
DLUM3	Lift up motor 3
DPFS1	Paper feed solenoid 1
DPFS2	Paper feed solenoid 2
DPFS3	Paper feed solenoid 3
DPFC1	Paper feed clutch 1
DPFC2	Paper feed clutch 2
DPFC3	Paper feed clutch 3
DTRC	Transport clutch

#### Lcc Unit Output

LLED	Dorr open LED
LPFC	Paper feed clutch
LPFS	Paper feed solenoid
LPFM	Transport motor
LLM	Lift motor

The LCC unit lit motor continues lifting up and falling down

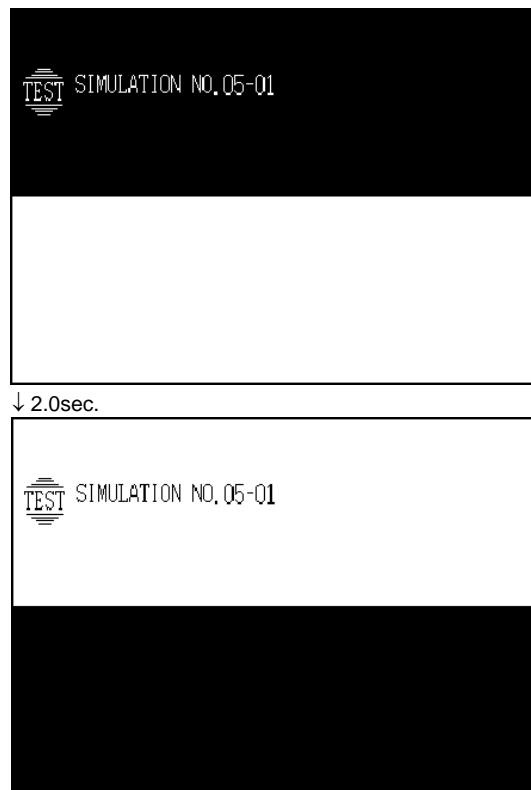


## 5

### 5 - 1

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the display, LCD in the operation panel, and control circuit.
Section	Operation (Display/Operation key)
Item	Operation
Operation/ Procedure	The LCD shows the following message. (The contrast changes in the sequence of Current level → MAX → MIN → Current level → MAX → MIN in every 2sec.)

During that period, each LED is lighted for 2sec.



### 5 - 2

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the heater lamp and the control circuit.
Section	Fixing (Fusing)
Item	Operation
Operation/ Procedure	1. Select the lamp to be checked with the key. 2. Press the [EXECUTE] key.

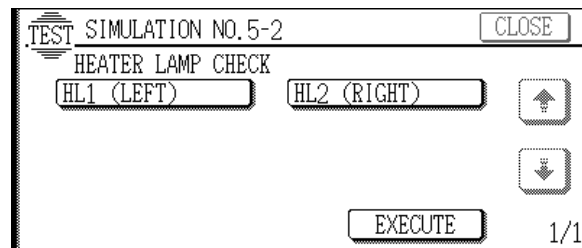
The selected heater lamp repeats ON/OFF in the frequency of 500msec 5 times.

Then the [EXECUTE] key returns to the original display.

When the [EXECUTE] key is pressed during ON/OFF operation of the heater lamp, the heater lamp is turned OFF and the [EXECUTE] key returns to the original display.

HL1 (LEFT): This lamp is on the left when viewed from the front and it heats the center of the lamp.

HL2 (RIGHT): This lamp is on the right when viewed from the front and it heats both ends of the lamp.

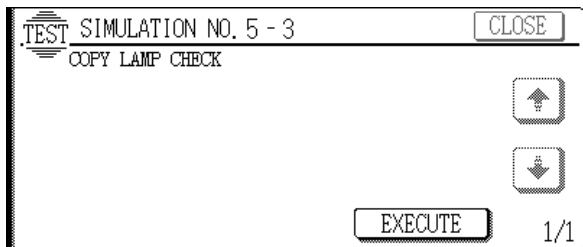


### 5 - 3

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the copy lamp and the control circuit.

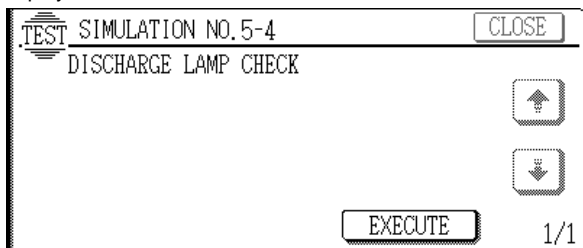
Section	Optical (Image scanning)
Item	Operation
Operation/ Procedure	When the [EXECUTE] key is pressed, the copy lamp is lighted for 10 sec. While the copy lamp is lighted, the [EXECUTE] key is highlighted. If the [EXECUTE] key is pressed under this state, the lamp is turned OFF.

After 10 sec, the copy lamp is turned OFF. At that time, the [EXECUTE] key returns to the normal display.



<b>5 - 4</b>	
Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the discharge lamp and the control circuit.
Section	Image process Others (Photoconductor/Developing/Transfer/Cleaning)
Item	Operation
Operation/ Procedure	When the [EXECUTE] key is pressed, the key is highlighted and the discharge lamp is lighted.

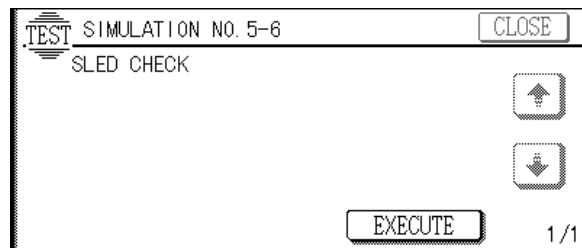
After 30 sec of lighting, the lamp is turned OFF and the [EXECUTE] key returns to the normal display.  
If the [EXECUTE] key is pressed while the lamp is lighted, the lamp is turned OFF and the [EXECUTE] key returns to the normal display.



<b>5 - 6</b>	
Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the separation lamp and its control circuit. (AR-501/505 only)
Section	Process (OPC drum, developing unit, transfer, cleaning) section
Item	Operation
Operation/ Procedure	When the [EXECUTE] key is pressed, it is highlighted and the separation lamp is lighted.

After 30sec of lighting, the lamp turns off and the [EXECUTE] key returns to the normal display.

When the [EXECUTE] key is pressed during the lamp is lighted, the lamp is turned off and the [EXECUTE] key returns to the normal display.

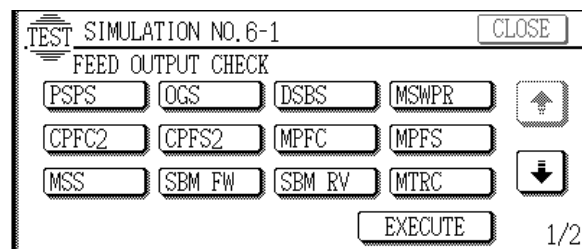


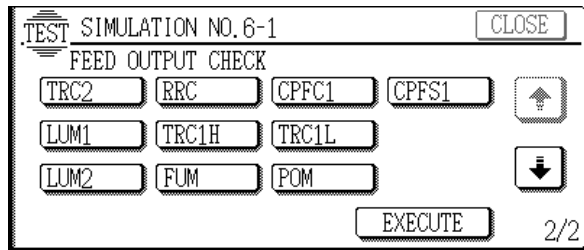
## 6

### 6 - 1

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the loads (clutches and solenoids) in the paper transport system and the control circuit.
Section	Paper transport (Discharge/Switchback/Transport)
Item	Operation
Operation/ Procedure	1. The names of the loads which can be operated are displayed. Select the load to be checked with the key, and the selected load is highlighted. 2. Press the [EXECUTE] key. The selected load starts the operation. During the operation of the load, the [EXECUTE] key is highlighted. If the [EXECUTE] key is pressed while it is highlighted, the operation is stopped.

CPFC1	Upper cassette paper feed clutch
CPFS1	Upper cassette paper feed solenoid
LUM1	Lower cassette lift up motor
CPFC2	Lower cassette paper feed clutch
CPFS2	Lower cassette paper feed solenoid
LUM2	Lower cassette lift up motor
MPFC	Manual paper feed clutch
MPFS	Manual paper feed solenoid
MSS	Manual paper entry gate solenoid
TRC1H	Transport clutch 1 high speed
TRC1L	Transport clutch 1 low speed
MTRC	Transport clutch low speed
TRC2	Transport clutch 2 high speed
RRC	Resist roller clutch
OGS	Paper exit gate solenoid
DSBS	Duplex unit paper entry switchback gate solenoid
PSPS	Separation pawl operation solenoid
SBM FW	Switchback motor forward rotation
SBM RV	Switchback motor reverse rotation



**6 - 2**

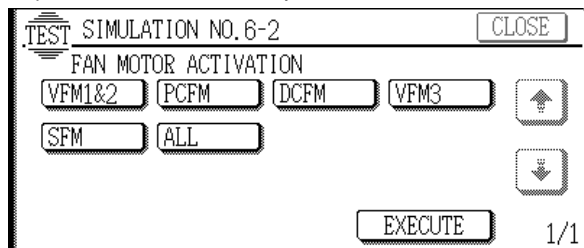
Purpose	Operation test/check
Function (Purpose)	Used to check the operation of each fan motor and its control circuit.
Section	Others
Item	Operation
Operation/ Procedure	1. The names of the loads which can be operated are displayed. Select the load to be checked with the key, and the selected load is highlighted.

## 2. Press the [EXECUTE] key.

The key is highlighted and the selected fan motor is rotated.

If the [EXECUTE] key is pressed while the fan motor is rotating, the [EXECUTE] key returns to the normal display and the fan motor is stopped. To operate or stop each fan motor, press the key of the fan motor.

However, [CFM Low] key and [CFM High] key cannot be pressed ON simultaneously.

**7****7 - 1**

Purpose	Setting/Operation test/check
Function (Purpose)	Used to set the aging operation conditions.
Item	Operation
Operation/ Procedure	1. Press each corresponding key to set for the aging operation. (Set items of each key)

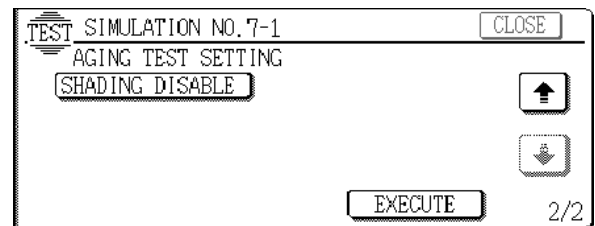
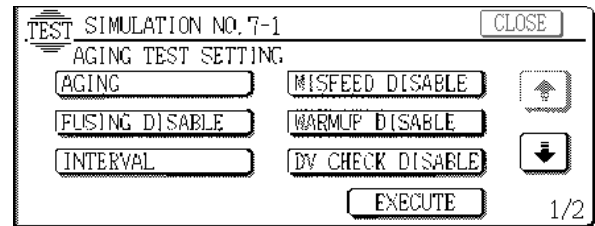
[AGING]	Aging setting
[MISFEED DISABLE]	Jam detection enable/disable setting
[FUSING DISABLE]	Fusing operation enable/disable setting
[WARMUP DISABLE]	Warm-up save setting
[INTERVAL]	Intermittent setting (Valid only in [AGING] setting)
[DV CHECK DISABLE]	Developing unit detection enable/disable setting
[SHADING DISABLE]	Shading enable/disable setting

The selected key is highlighted.

## 2. Press the [EXECUTE] key.

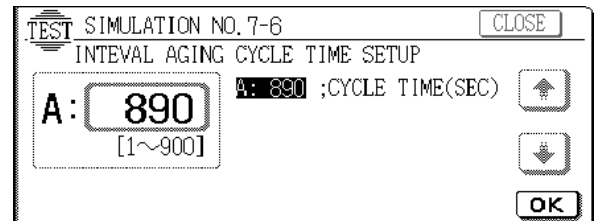
Aging is set and the display returns to the simulation main code entry display.

\* When this simulation is executed, the machine resumes operation regardless of setting (changing) of aging.

**7 - 6**

Purpose	Setting/Operation test/check
Function (Purpose)	Used to set the cycle of intermittent aging.
Item	Operation
Operation/ Procedure	1. Enter the interval aging cycle time (sec) with the 10-key pad.

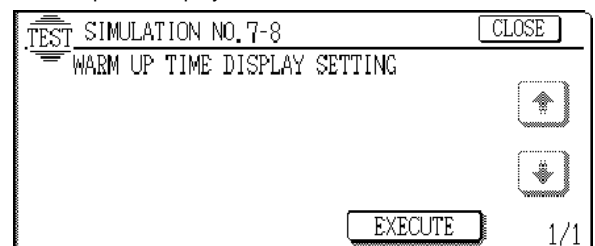
## 2. Press [OK] key to set the entered cycle time.

**7 - 8**

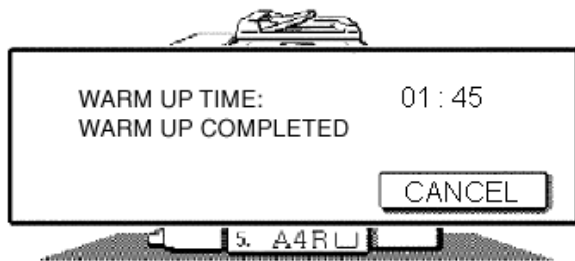
Purpose	Setting/Operation test/check
Function (Purpose)	Used to set YES/NO of display of the warmup time.
Item	Operation
Operation/ Procedure	Press the [EXECUTE] key to set the warmup time display.

When the [EXECUTE] key is pressed, the warmup time display setting is executed and the display returns to the simulation main code entry display.

\* When this simulation is canceled after completion of it, the machine resumes operation regardless of setting (changing) of warmup time display.



After completion of warming up, the warm-up time is displayed.



## 8

### 8 - 1

Purpose	Adjustment/Operation test/check
Function (Purpose)	Used to check the operation of the developing bias voltage in each print mode and its control circuit. (For OPC drum type B)
Section	Process (OPC drum, developing unit, transfer, cleaning) section
Operation/Procedure	(The developing bias output voltage of each print mode can be adjusted and checked.)

1. Select the print mode with [↑] key and [↓] key.
2. Enter the adjustment value with the 10-key pad.
3. Press the [EXECUTE] key.

The [EXECUTE] key is highlighted, the adjustment value entered in procedure 2 is set, and the voltage corresponding to the set value is supplied.

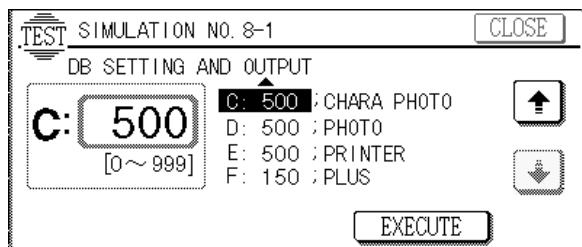
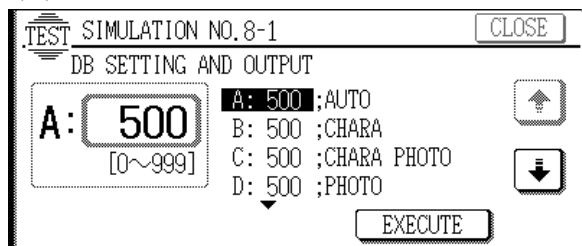
After supplying the voltage for 30 sec, the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed while the voltage is supplied, the voltage output is stopped and the [EXECUTE] key returns to the normal display.

(AR-250/280/281/285/286/335/336/405)

AUTO	: Auto mode	* (500) (-500V ±5V)
CHARA	: Character mode	* (500) (-500V ±5V)
CHARA PHOTO	: Character/Photo mode	* (500) (-500V ±5V)
PHOTO	: Photo mode	* (500) (-500V ±5V)
TONER SAVE	: Toner save mode	* (500) (-500V ±5V)
PRINTER	: Printer mode	* (500) (-500V ±5V)
PLUS	: Cleaning mode	* (150) (+150V ±5V)
	Developing bias voltage	

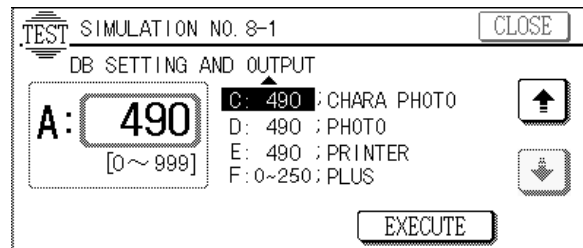
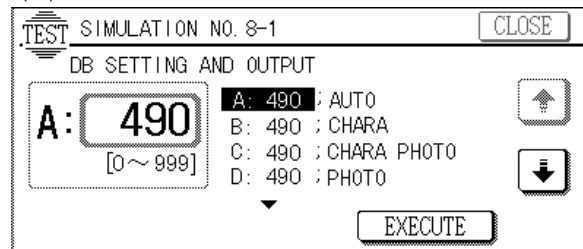
\* ( ): Default



(AR-501/505)

AUTO	: Auto mode	* (415) (-425V ±5V)
CHARA	: Character mode	* (490) (-500V ±5V)
CHARA PHOTO	: Character/Photo mode	* (490) (-500V ±5V)
PHOTO	: Photo mode	* (490) (-500V ±5V)
TONER SAVE	: Toner save mode	* (490) (-500V ±5V)
PRINTER	: Printer mode	* (490) (-500V ±5V)
PLUS	: Cleaning mode	* (165) (+150V ±5V)
	Developing bias voltage	

\* ( ): Default



### 8 - 2

Purpose	Adjustment/Operation test/check
Function (Purpose)	Used to check and adjust the operation of the main charger grid voltage in each print mode and the control circuit. (for OPC drum type B)
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)
Operation/Procedure	(The charging/grid output voltage in each print mode can be adjusted and checked.)

1. Select the print mode with [↑] key and [↓]key.
2. Enter the adjustment value with the 10-key pad.
3. Press the [EXECUTE] key.

The [EXECUTE] key is highlighted, the adjustment value entered in procedure 2 is set, and the voltage corresponding to the set value is supplied.

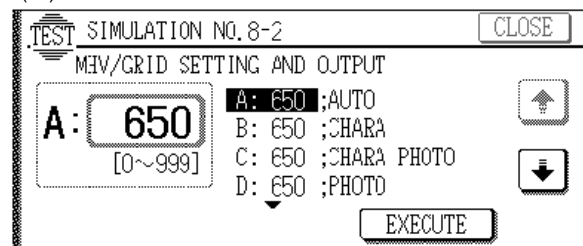
After supplying the voltage for 30 sec, the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed while the voltage is supplied, the voltage output is stopped and the [EXECUTE] key returns to the normal display.

(AR-250/280/281/285/286/335/336/405)

AUTO	: Auto mode	* (641) (-642 ±5V)
CHARA	: Character mode	* (641) (-642 ±5V)
CHARA PHOTO	: Character/Photo mode	* (641) (-642 ±5V)
PHOTO	: Photo mode	* (641) (-642 ±5V)
PRINTER	: Printer mode	* (641) (-642 ±5V)

\* ( ): Default





(AR-501/505)

AUTO : Auto mode \* (560) (-570 ±5V)  
 CHARA : Character mode \* (635) (-645 ±5V)  
 CHARA PHOTO : Character/Photo mode \* (635) (-645 ±5V)  
 PHOTO : Photo mode \* (635) (-645 ±5V)  
 PRINTER : Printer mode \* (635) (-645 ±5V)

\* ( ) : Default

**8 - 6**

Purpose	Adjustment/Operation test/check
Function (Purpose)	Used to check and adjust the transfer charger current and the control circuit.
Section	Image process Copy (Photoconductor/Developing/Transfer/Cleaning)
Operation/Procedure	The transfer charger output voltage in printing the front and the back of paper can be adjusted and checked.

1. Select the print mode with [↑] key and [↓] key.
2. Enter the adjustment value with the 10-key pad.
3. Press the [EXECUTE] key.

The [EXECUTE] key is highlighted, the adjustment value entered in procedure 2 is set, and the voltage corresponding to the set value is supplied.

After supplying the voltage for 30 sec, the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed while the voltage is supplied, the voltage output is stopped and the [EXECUTE] key returns to the normal display.

**FRONT MODE:** Front surface print (with the paper feed tray and manual paper feed tray)

**BACK MODE:** Back surface print (with duplex paper feed)

(AR-250/280/281/285/286/335/336/405)

Default: 140 (13.5 + 1.5μA)

(AR-501/505)

Default: 255 (18.0 + 1.5μA)

**8 - 7**

Purpose	Adjustment/Operation test/check
Function (Purpose)	Used to check and adjust the operation of the separation charger voltage and its control circuit.
Section	Image process Others (Photoconductor/Developing/Transfer/Cleaning)
Operation/Procedure	The separation charger output voltage in printing the front and the back of paper can be adjusted and checked.

1. Select the print mode with [↑] key and [↓] key.
2. Enter the adjustment value with the 10-key pad.
3. Press the [EXECUTE] key.

The [EXECUTE] key is highlighted, the adjustment value entered in procedure 2 is set, and the voltage corresponding to the set value is supplied.

After supplying the voltage for 30 sec, the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed while the voltage is supplied, the voltage output is stopped and the [EXECUTE] key returns to the normal display.

**FRONT MODE:** Front surface print (with the paper feed tray and manual paper feed tray)

**BACK MODE:** Back surface print (with duplex paper feed)

(AR-250/280/281/285/286/335/336/405)

Default: 90 (DC -140 ±10V)

(AR-501/505)

Default: 177 (DC -200 ±10V)

**9****9 - 1**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the loads (clutches and solenoids) in the duplex section and the control circuit.
Section	Duplex
Item	Operation
Operation/Procedure	1. Select the load to be checked with the key. The selected key is highlighted.

2. Press the [EXECUTE] key.  
The load selected in procedure 1 is operated.

While the load is operated, the [EXECUTE] key is highlighted.  
If the [EXECUTE] key is pressed under this state, the load operation is interrupted.

DTC1	Duplex unit paper entry transport clutch 1
DTC2	Duplex unit paper entry transport clutch 2
DSCS	Duplex unit roller contact solenoid

**9 - 2**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of sensors and detectors in the duplex section and the control circuit.
Section	Duplex
Item	Operation
Operation/ Procedure	The operations of sensors and detectors in the duplex section are displayed.

The active sensors and detectors are highlighted.

DSBD	Duplex unit paper entry switchback section sensor
DPPD1	Duplex unit paper transport switch 1
DPPD2	Duplex unit paper transport switch 2
DPPD3	Duplex unit paper transport switch 3
DPAD	Duplex unit alignment plate home sensor

**9 - 4**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the duplex unit alignment plate and its control circuit.
Section	Duplex
Item	Operation
Operation/ Procedure	1. Select the paper size. The selected paper size is highlighted.

2. Press the [EXECUTE] key.

Alignment operation is continuously operated.

During the operation, the [EXECUTE] key is highlighted.

If the [EXECUTE] key is pressed under this state, the operation is interrupted.

**10****10 - 0**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the toner motor and its control circuit.

(Note) Do not execute this simulation with toner in the toner hopper. If executed, excessive toner may enter the developing section, causing an overtoner trouble. Be sure to remove the toner motor from the toner hopper before executing this simulation.

Section	Image process (Photoconductor/Developing/Transfer/Cleaning)	Developer/Toner Hopper
---------	--	------------------------

Item	Operation
------	-----------

Operation/ Procedure	When the [EXECUTE] key is pressed, it is highlighted and the toner motor rotates for 10 sec.
----------------------	--

After 10sec of rotation, the toner motor stops and the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed during rotation, the toner motor is stopped and the [EXECUTE] key returns to the normal state.

**13****13 - 0**

Purpose	Clear/Cancel (Trouble etc.)
Function (Purpose)	Used to cancel the self diag U1 trouble.

Item	Trouble
------	---------

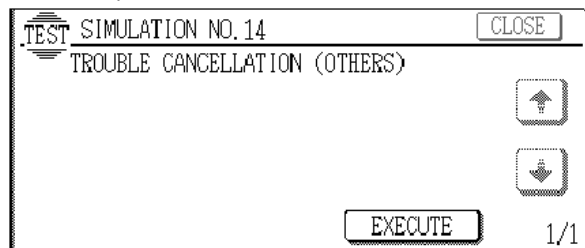
Operation/ Procedure	When the [EXECUTE] key is pressed, the U1 trouble is canceled and the display returns to the simulation main code entry screen.
----------------------	---

After this simulation is canceled, the machine resumes operation.

**14****14 - 0**

Purpose	Clear/Cancel (Trouble etc.)
Function (Purpose)	Used to cancel the self diag U1/LOC/U2/PF troubles.

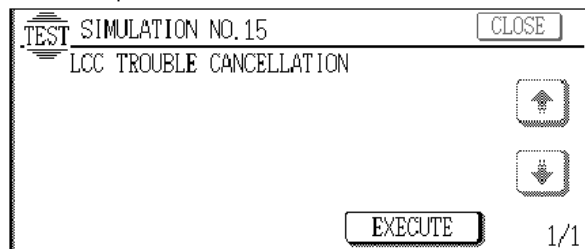
Item	Trouble	Error
Operation/ Procedure	When the [EXECUTE] key is pressed, the troubles excluding U1/LCC/U2/PF are canceled and the display returns to the simulation main code entry screen. After this simulation is canceled, the machine resumes operation.	



## 15

## 15 - 0

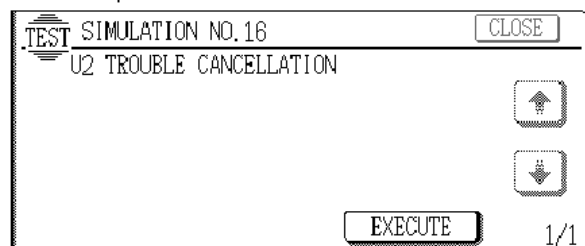
Purpose	Clear/Cancel (Trouble etc.)
Function (Purpose)	Used to cancel the self diag U4 - 09/20/21/22 (large capacity tray) trouble.
Section	Paper transport
Item	Trouble
Operation/ Procedure	When the [EXECUTE] key is pressed, the U6 (09/20/21/22) (LCC) trouble is canceled and the display returns to the simulation main code entry screen. After canceling this simulation, the machine resumes operation.



## 16

## 16 - 0

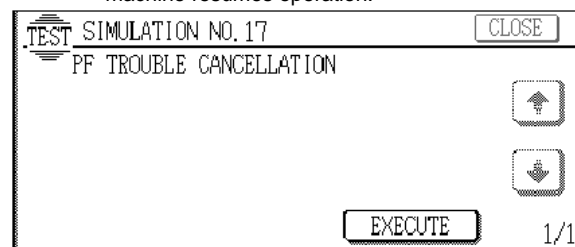
Purpose	Clear/Cancel (Trouble etc.)
Function (Purpose)	Used to cancel the self diag U2 trouble.
Item	Trouble
Operation/ Procedure	When the [EXECUTE] key is pressed, the U2 trouble is canceled and the display returns to the simulation main code entry screen. After this simulation is canceled, the machine resumes operation.



## 17

## 17 - 0

Purpose	Clear/Cancel (Trouble etc.)
Function (Purpose)	Used to cancel copy inhibition by the host computer during the self diag PF.
Section	Communication unit (TEL/LIU/MODEM etc.)
Item	Trouble
Operation/ Procedure	When the [EXECUTE] key is pressed, the PF trouble is canceled and the display returns to the simulation main code entry screen. After this simulation is canceled, the machine resumes operation.

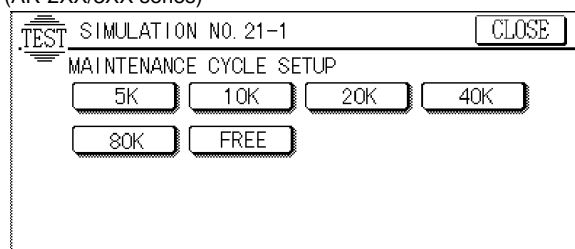


## 21

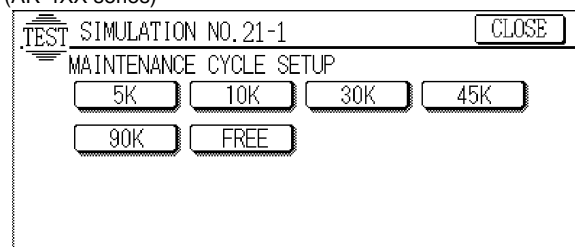
## 21 - 1

Purpose	Setting
Function (Purpose)	Used to set the maintenance cycle.
Item	Specifications
Operation/ Procedure	When the maintenance cycle is selected with the key, the selected key is highlighted. The maintenance message is displayed in every selected cycle. When FREE is selected, the maintenance display is not shown.

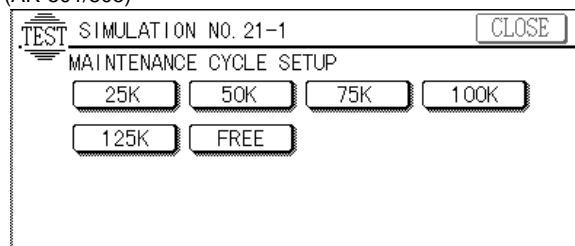
(AR-2XX/3XX series)



(AR-4XX series)



(AR-501/505)



**22****22 - 1**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the print out count of each section in each operation mode. (Used to check the maintenance timing.)
Item	Counter
Operation/Procedure	FAXandPDA/ZRare only for Japan models.

TEST SIMULATION NO. 22-1 CLOSE

COUNTER DATA DISPLAY

TOTAL : nnnnnnnn

MAINTENANCE : nnnnnnnn

DEVELOPER : nnnnnnnn

COPIES : nnnnnnnn

FAX : nnnnnnnn

1/2

TEST SIMULATION NO. 22-1 CLOSE

COUNTER DATA DISPLAY

PRINTER : nnnnnnnn

PDA/ZR : nnnnnnnn

OTHERS : nnnnnnnn

2/2

nnnnnnnn : Counter value

**22 - 2**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the total numbers of misfeed and troubles. (When the number of misfeed is considerably great, it is judged as necessary for repair. The misfeed rate is obtained by dividing this count value with the total counter value.)
Item	Mis-feed
Operation/Procedure	<b>MACHINE JAM:</b> The number of paper jam troubles occurred in the sections other than the document feeders (SPF/ADF/RADF). <b>DF JAM:</b> The number of paper jam troubles occurred in the document feeders (SPF/ADF/RADF). <b>TROUBLE:</b> Total number of troubles

TEST SIMULATION NO. 22-2 CLOSE

JAM/TROUBLE COUNTER DATA DISPLAY

MACHINE JAM : nnnnnnnn

DF JAM : nnnnnnnn

TROUBLE : nnnnnnnn

1/1

nnnnnnnn : Counter value

**22 - 3**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the misfeed positions and the number of misfeed in each position. (If the number of misfeed is considerably great, it can be judged as necessary for repair.) (Sections other than ADF/RADF/SPF sections)

Item	Mis-feed
Operation/Procedure	The misfeed history sections indicated by the sensors and detectors are displayed sequentially from the latest one. Max. 40 items of information can be stored, and the oldest one is deleted sequentially. The trouble position may be presumed with this data.

TEST SIMULATION NO. 22-3 CLOSE

JAM HISTORY DATA DISPLAY

\*\*\*\*\*, \*\*\*\*\*

\*\*\*\*\*, \*\*\*\*\*

\*\*\*\*\*, \*\*\*\*\*

\*\*\*\*\*, \*\*\*\*\*

\*\*\*\*\*, \*\*\*\*\*

\*\*\*\*\*, \*\*\*\*\*

1/m

**22 - 4**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the total trouble (self diag) history.
Item	Mis-feed
Operation/Procedure	The trouble history error codes are displayed sequentially from the latest one. Max. 40 items of information can be stored, and the oldest one is deleted sequentially. The machine condition can be presumed according to this data.

TEST SIMULATION NO. 22-4 CLOSE

TROUBLE CODE DATA DISPLAY

\*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*,

\*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*,

\*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*,

\*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*,

\*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*, \*\*\*-\*\*,

1/m

**22 - 5**

Purpose	Others
Function (Purpose)	Used to check the ROM version of each unit (section).
Item	Software
Operation/Procedure	The ROM version of each section can be checked. If there is any problem in the software, check the ROM version of each section with this simulation and replace with a new version if necessary. FAX is for Japan model only.

TEST SIMULATION NO. 22-5 CLOSE

S/N : nnnnnnnnnn

ICU: n.nn PCU: n.nn

OPE: n.nn DATA: n.nn

DF: n.nn FINISHER: n.nn

DESK: n.nn LCC: n.nn

PRINTER: n.nn

1/2

TEST SIMULATION NO. 22-5 CLOSE

S/N : nnnnnnnnnn

FAX MAIN: n.nn FAX SUB: n.nn

2/2

**22 - 6**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to output the list of the setting and adjustment data (simulations, FAX soft switch, counters).
Item	Data Adjust/Setting data
Operation/Procedure	When installing or servicing, execute this simulation to print and store the adjustment values and setting data for use in the next servicing. (Memory trouble, PWB replacement, etc.)

In this case, the print conditions can be set optionally.

1. Select the setup item.  
(The selected item is highlighted.)
2. Set the item and conditions with the 10-key pad.
3. Press the [EXECUTE] key to print various data.
  - A: Print out items (Contents)
    - 1: All adjustment values and setup data
    - 2: All counter data
    - 3: FAX soft switch setup data (Japan only)
    - 4: Print density adjustment data
    - 5: Adjustment and setup data of the other simulations
  - B: Paper feed mode
    - 1: Manual paper feed
    - 2: Upper paper feed tray
    - 3: Lower paper feed tray
    - 4: Desk upper paper feed tray
    - 5: Desk middle paper feed tray
    - 6: Desk lower paper feed tray
    - 7: Large capacity paper feed tray

**22 - 7**

Purpose	User data output/Check (Display/Print)
Function (Purpose)	Used to display the key operator code. (This simulation is used when the customer forgets the key operator code.)
Item	Data User data
Operation/Procedure	

nnnnn : Key operator code

**22 - 8**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the number of use of the staple, the ADF, RADF, SPF, and scanning.
Item	Counter

Operation/Procedure	This data is used to check the use frequency of each section. According to this data, maintenance is executed.
---------------------	--

nnnnnnnn : Counter value

**22 - 9**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the number of use of each paper feed section. (the number of prints)
Section	Paper transport
Item	Counter
Operation/Procedure	This data is used to check the use frequency of each paper feed section. According to this data, maintenance is performed.

nnnnnnnn : Counter value

**22 - 10**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the system configuration (option, internal hardware).
Item	Specifications Options
Operation/Procedure	This simulation allows to check the system configuration. The devices and the option units which are installed are displayed with the model names or size, etc.

(AR-230/280/285 series)

(AR-330/335 series)

```

TEST SIMULATION NO. 22-10
MACHINE SYSTEM
  DF: AR-SF1      OUTPUT: AR-TR1
  ADU: AR-DU1     LCC: AR-LC1
  DESK: 2TRAY     ICU: S330
  MEMORY: 16MB    HD:-----
  W. S. COPY: AR-EB2  PRINTER :-----

```

(AR-2X1/3X1/4XX/250/XX6 series)

(FAX Model)

TEST SIMULATION NO. 22-10		CLOSE
MACHINE	SYSTEM	
DF:	AR-SP1	OUTPUT: AR-TR1
ADU:	AR-DU1	LCC: AR-LC1
DESK:	2TRAY	ICU: F281
MEMORY:	48MB	HD: -----
SCSI-A:	-----	SCSI-B: -----
		1/2

TEST SIMULATION NO.22-10		CLOSE
MACHINE SYSTEM		
FAX:	AR-FX1	: AR-FL1
:	4MB	: AR-HM2
:	AR-SU1	
		2/2

(Non FAX Model)

```

TEST SIMULATION NO.22-10
MACHINE SYSTEM
  DF:  AR-DF2      OUTPUT:  AR-TR1
  ADU:  AR-DU1      LCC:    AR-LC1
  DESK:  2TRAY      ICU:    405
  MEMORY: 16MB      HD:     2GB
  SCSI-A: AR-PB2    SCSI-B: -----

```


(AR-5XX series)



```

TEST SIMULATION NO.22-10
MACHINE SYSTEM
DF: RSPF OUTPUT: AR-FN3
ADU: AR-DU1 LCC: AR-LC1
DESK: 2TRAY ICU: 505/S505
MEMORY: 48MB HD: 2.1GB
SCSI-A: ----- SCSI-B: -----

```


**22 - 11**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the use frequency of FAX (send/receive). (FAX model only)
Section	FAX
Item	Data
Operation/ Procedure	 TEST SIMULATION NO.22-11 <div style="float: right; border: 1px solid black; padding: 2px 10px; text-align: center;">CLOSE</div>

TEST SIMULATION NO.22-11		CLOSE
:	nnnnnnnn	
:	nnnnnnnn	
:	nnnnnnnn	
		1/1

**22 - 12**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the misfeed positions and the number of misfeed at each position. (When the number of misfeed is considerably great, it can be judged as necessary for repair.)
Section	SPF/ADF/RSPF/RADF
Item	Mis-feed



Operation/Procedure

**TEST** SIMULATION NO. 22-12 CLOSE

DF JAM HISTORY DATA DISPLAY

*****	*****	*****	*****
*****	*****	*****	*****
*****	*****	*****	*****
*****	*****	*****	*****
*****	*****	*****	*****
*****	*****	*****	*****
*****	*****	*****	*****
*****	*****	*****	*****

1/m

## 24

**24 - 1**

Purpose	Data clear
Function (Purpose)	Used to clear the misfeed counter, the misfeed history, the trouble counter, and the trouble history. (The counters are cleared after completion of maintenance.)
Item	Counter
Operation/ Procedure	<ol style="list-style-type: none"> <li>1. Select the counter to be cleared.  <b>MACHINE:</b> Machine, JAM counter</li> </ol>

- |                         |
|-------------------------|
| operation/<br>procedure |
|-------------------------|

  1. Select the counter to be cleared.  
**MACHINE:** Machine JAM counter  
**DF:** SPF/RADF/ADF JAM counter  
**TROUBLE:** Trouble counter  
(When selected, it is highlighted.)
  2. Press the [EXECUTE] key.  
The display for reconfirmation to clear is shown.
  3. Select YES or NO to clear the counter.  
YES: Clear  
NO: Not clear

After completion of maintenance, the above counter is cleared

[illegible]

**24 - 2**

Purpose	Data clear
Function (Purpose)	Used to clear the number of use (the number of prints) of each paper feed section.
Section	Paper transport
Item	Counter
Operation/ Procedure	<p>1. Select the counter to be cleared.</p> <p><b>BYPASS:</b> Manual paper feed tray counter</p>

1. Select the counter to be cleared.  
**BYPASS:** Manual paper feed tray counter  
**TRAY1:** Tray 1 counter  
**TRAY2:** Tray 2 counter  
**DESK1:** Desk 1 counter  
**DESK2:** Desk 2 counter

**DESK3:** Desk 3 counter  
**ADU:** Duplex unit counter  
**LCC:** Large capacity tray counter  
 (When selected, it is highlighted.)

- Press the [EXECUTE] key.  
The display for reconfirmation to clear is shown.
- Select YES or NO to clear the counter.  
 YES: Clear  
 NO: Not clear

After completion of maintenance, the above counter is cleared.

### 24 - 3

Purpose	Data clear
Function (Purpose)	Used to clear the data of the number of use of the staple, the SPF, ADF, RSPF, RADF and scanning.
Item	Counter
Operation/ Procedure	1. Select the counter to be cleared.

**DF:** ADF/SPF/RADF/RSPF counter  
**SCAN:** Scan counter  
**STAPLER:** Stapler counter  
 (When selected, it is highlighted.)

- Press the [EXECUTE] key.  
The display for reconfirmation to clear is shown.
- Select YES or NO to clear the counter.  
 YES: Clear  
 NO: Not clear

After completion of maintenance, the above counter is cleared.

### 24 - 4

Purpose	Data clear
Function (Purpose)	Used to reset the maintenance counter.
Item	Counter
Operation/ Procedure	1. Press the [EXECUTE] key. The display for reconfirmation to clear is shown.

- Select YES or NO to clear the counter  
 YES: Clear  
 NO: Not clear

The above counter is cleared after completion of maintenance.

### 24 - 5

Purpose	Data clear
Function (Purpose)	Used to reset the developer quantity counter. (The developer counter of the installed developing unit is reset.)
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)
Item	Counter Developer
Operation/ Procedure	1. Press the [EXECUTE] key. The display for reconfirmation to clear is shown.

- Select YES or NO to clear the counter.  
 YES: Clear  
 NO: Not clear

The above counter is cleared after replacement of developer.

### 24 - 6

Purpose	Data clear
Function (Purpose)	Used to reset the copy counter.
Item	Counter Copier
Operation/ Procedure	1. Press the [EXECUTE] key. The display for reconfirmation to clear is shown.

- Select YES or NO to clear the counter.  
 YES: Clear  
 NO: Not clear

Generally, the counter is not cleared.

### 24 - 7

Purpose	Data clear
Function (Purpose)	Used to clear the OPC drum (membrane decrease) correction counter. (This simulation is executed when the OPC drum is replaced.)

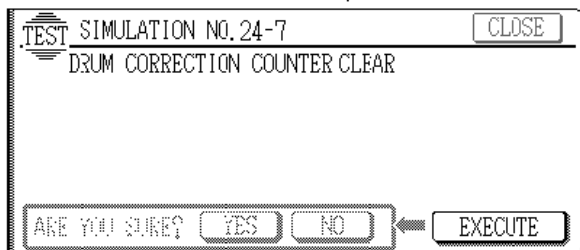
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)	Photo conductor
Item	Counter	Photo conductor
Operation/ Procedure	1. Press the [EXECUTE] key. The display for reconfirmation to clear is shown.	

2. Select YES or NO to clear the counter.

YES: Clear

NO: Not clear

The above counter is cleared after replacement of the OPC drum.



## 24 - 8

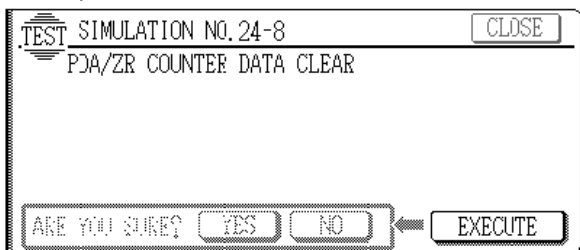
Purpose	Data clear
Function (Purpose)	Used to clear the Zaurus print counter.
Item	Counter
Operation/ Procedure	1. Press the [EXECUTE] key. The display for reconfirmation to clear is shown.

2. Select YES (Clear) or NO (Not clear).

YES: Clear

NO: Not clear

Generally the counter is not cleared.



Note	Japan only
------	------------

## 24 - 9

Purpose	Data clear	
Function (Purpose)	Used to clear the printer print counter. (The counter is cleared after completion of maintenance.)	
Section	Printer	
Item	Counter	Printer
Operation/ Procedure	1. Select the counter to be cleared. <b>PRINTER:</b> Printer counter	

2. Press the [EXECUTE] key.

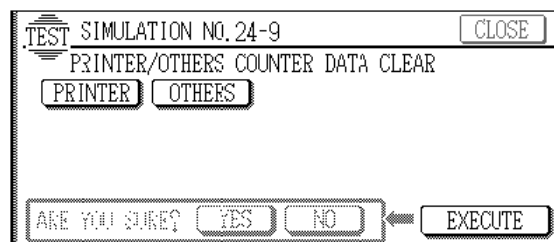
The display for reconfirmation to clear is shown.

3. Select YES (Clear) or NO (Not clear).

YES: Clear

NO: Not clear

The above counter is cleared after completion of maintenance.



## 24 - 11

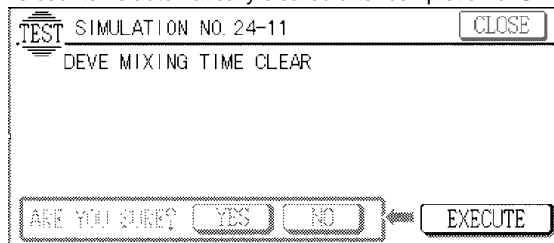
Purpose	Data clear	
Function (Purpose)	Used to reset the developer rotation time counter. (The developer counter of the installed developing unit is reset.) (AR-501/505 only)	
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)	Developer/Toner Hopper
Item	Counter	Developer
Operation/ Procedure	1. Press the [EXECUTE] key. The display for reconfirmation to clear is shown.	

2. Select YES or NO to clear the counter.

YES: Clear

NO: Not clear

The counter is automatically cleared after completion of SIM 25-2.



## 25

### 25 - 1

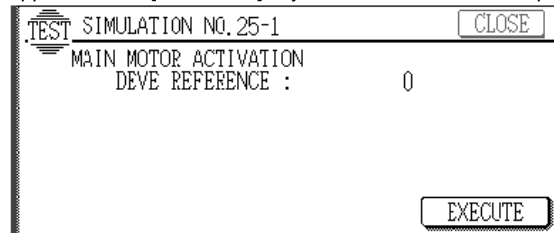
Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the main drive (excluding the scanner section) and to check the operation of the toner concentration sensor. (The toner concentration sensor output can be monitored.)
Section	DRIVE
Item	Operation
Operation/ Procedure	The main motor rotates for 3 minutes, and the drive system can be checked.

The toner concentration sensor output value is displayed.

When the [EXECUTE] key is pressed, it is highlighted and the main motor rotates and the toner concentration sensor output value is displayed.

After 3 minutes, the main motor stops and the [EXECUTE] key returns to the normal display.

If the [EXECUTE] key is pressed during rotation, the operation is stopped and the [EXECUTE] key returns to the normal display.





**25 - 2**

Purpose	Setting
Function (Purpose)	Used to make the initial setting of toner concentration when replacing developer.
Section	Image process                      Developer/Toner Hopper (Photoconductor/Developing/Transfer/Cleaning)
Operation/Procedure	When the [EXECUTE] key is pressed, it is highlighted and the main motor rotates, and the toner concentration sensor detects the toner concentration and the output value is displayed.

After stirring for 3 minutes, the toner concentration detection level average value is set (stored) as the reference toner concentration control value.

If the [EXECUTE] key is pressed during rotation, the operation stops and the [EXECUTE] key returns to the normal display.

If [EE-EU] or [EE-EL] is displayed, it means the reference toner concentration control value is not set normally.

Default: 0

(Note) Do not set to 0.

**25 - 8**

Function (Purpose)	Used to set the timing of toner concentration control correction B and the correction quantity. The timing is determined according to the accumulated use time of developer. (AR-501/505 only)
Operation/Procedure	When this simulation is executed, the current set value is displayed. Under this state, the set value can be changed by pressing the 10-key.

When [OK] key is pressed, the set value is stored in the EEPROM.

	Content	Set range	Default
A	The first correction time [min]	0 - 500	200
B	Second and later correction time [min]	0 - 500	50
C	Number of times of correction	0 - 10	3
D	Correction quantity	0 - 30	0

**26****26 - 1**

Purpose	Setting
Function (Purpose)	Used to set options. (This simulation is used to make option setting when an option is installed.)
Item	Specifications                      Options
Operation/Procedure	Enter the code number corresponding to the option installation with the 10-key pad and press the [OK] key.

When an option is installed or removed, this setting must be changed accordingly. If this setting is improper, an error message is displayed.

(AR-230/280/285/330/335 series)

Set value	Connection option
0	No connection (Default)
1	AR-TR1
2	AR-TR1 + AR-DU1

(AR-2X1/3X1/4XX/250/XX6 series)

Set value	Connection option
0	No connection
1	AR-TR1
2	AR-TR1 + AR-DU1
3	AR-DU1 only

(AR-5XX series)

**26 - 2**

Purpose	Setting
Function (Purpose)	1) Used to set the paper size of the large quantity paper tray. (When the paper size is changed, the left paper size must be also changed with this simulation.)

2) Used to detect the paper or document size of 8.5" x 13" (Inch series) and set the display mode. (All paper feed modes)

Section	Paper transport
Item	Specifications
Operation/Procedure	1. Select the item to be set with [↑] key and [↓] key.

**A:** Large capacity paper tray paper size setting

**B:** 8.5" x 13" (330mm/13") paper size detection mode setting

**C:** Manual feed paper size setting

2. Enter the code number corresponding to the paper size of the large capacity paper feed tray with the 10-key and press the [OK] key.

Set value	Setting size
1	8.5X11
2	A4 (Default)
3	B5

3. Used to set the size detection mode when 8.5" x 13" paper or document is used.

Enter the code number with the 10-key pad and press the [OK] key.

\* Detection size when 8.5" x 13" document/paper is used

	Unit	Destination	Set value	
			0 (Default) (Invalid)	1 (Valid)
Document	AR-SP1	All destinations	8.5" x 14"	8.5" x 13" *1
	AR-AF1	Japan	A4R	A4R *5
	AR-RF1	EX AB series (SLK/SEEG)	A4R	A4R *5
		EX AB series (SCA/ Others)	A4R	8.5" x 13" *3
		Inch series (SEC/SECL)	8.5" x 14"	8.5" x 14" *5
		Inch series (Others)	8.5" x 14"	8.5" x 13" *1
	Document table	Japan/EX AB series	B4	8.5" x 13" *2
Paper		Inch series	8.5" x 14"	8.5" x 13" *1
	Main body	All destinations	8.5" x 14"	8.5" x 13" *4
	Manual feed tray	All destinations	— *6	
	Paper feed cassette	All destinations		
	AR-DE1/DE2	All destinations	—	
	AR-LC1	All destinations		

\*1: A document of 8.5" x 14" is detected as 8.5" x 13".

\*2: A document of B4 is detected as 8.5" x 13".

\*3: A document of A4R is detected as 8.5" x 13".

\*4: A document of 8.5" x 14" is detected as 8.5" x 13".

\*5: Applicable by replacing the document set tray of the AR-AF1/RF1.

\*6: Setting is available with the key operator program (P40).

Value	Display	Paper	
1	Characters	HEAVY PAPER	PLAIN PAPER
2	Weight in g.	106 - 200 g/m <sup>2</sup>	56 - 105 g/m <sup>2</sup>
3	Weight in lbs.	28+ - 55 lbs	15 - 28 lbs

### 26 - 3

Purpose	Setting
Function (Purpose)	Used to set the specifications of the auditor. Setting must be made depending on the use condition of the auditor.
Section	Auditor
Item	Specifications
Operation/ Procedure	Enter the code number corresponding to the auditor specification mode with the 10-key pad and press the [OK] key.

Set value	Specification mode
1	Built-in auditor mode (Default)
2	Coin vendor
3	Others

### 26 - 5

Purpose	Setting
Function (Purpose)	Used to set the count mode of the total counter and the maintenance counter.
Item	Specifications Counter
Operation/ Procedure	Used to set the single count-up or double count-up for the total counter, the maintenance counter, and the developer counter when printing is performed with A3, 11 x 17" paper,

- Select the kind of the counter with [↑] and [↓] key.

A	Total
B	Maintenance
C	Developer

- Enter "1" or "2" with the 10-key pad and press the [OK] key.

- Single count
- Double count

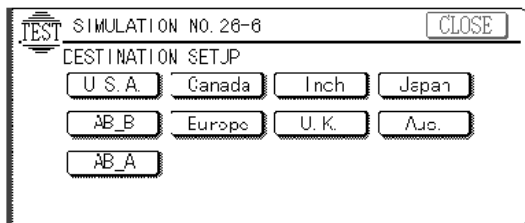
Default: 2

### 26 - 6

Purpose	Setting
Function (Purpose)	Used to set the specifications depending on the destination.
Item	Specifications the Destination
Operation/ Procedure	Select the destination referring to the table below.

U.S.A.	United States of America
Canada	Canada
Inch	Inch series, other destinations
Japan	Japan
AB_B	AB series (B5 detection) other destinations
Europe	Europe
U.K.	United Kingdom
Aus.	Australia
AB_A	AB series (A5 detection) other destinations

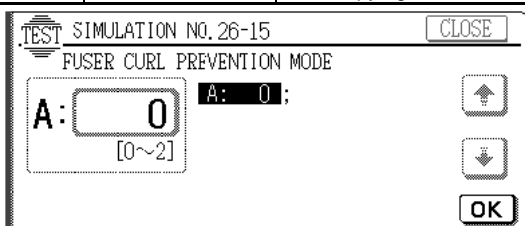
When the destination setting is changed, the following specification is changed.  
(Toner save mode setup specification) (Paper specification)

**26 - 15**

Purpose	Setting
Function (Purpose)	Used to set the fusing operation mode (paper curl corresponding mode).
Section	Fixing (Fusing)
Item	Operation
Operation/ Procedure	Due to the paper type (paper property), paper may be curled in the fusing section and cause a paper jam. To prevent against this, the fusing condition is changed.

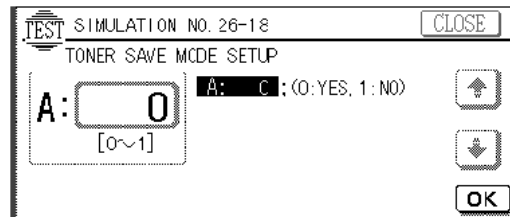
Enter the code number corresponding to the fusing condition and press the [OK] key.

Set value	Remedy mode	Fusing condition
0	Normal operation	(Default)
1	Remedy mode 1	a. Racing until the specified fusing temperature is reached.
2	Remedy mode 1	a. Racing is performed until the specified fusing temperature is reached. b. Copy mode is duplex mode or sort. Group mode • Previous rotation is made for 5 sec before starting copying.

**26 - 18**

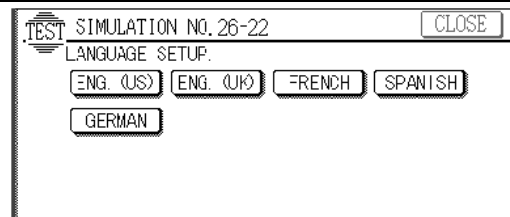
Purpose	Setting
Function (Purpose)	Used to set VALID/INVALID of toner save operation. (This simulation is valid only in the Japan and UK versions. (It depends on SIM 26-6 (Destination setting). For the other destinations, the same setting can be executed with the user program.)
Item	Specifications      Operation mode (Common)
Operation/ Procedure	Enter the code number corresponding to the condition (the toner save YES/NO) with the 10-key and press the [OK] key.

Set value	Toner save
0	YES
1	NO (Default)

**26 - 22**

Purpose	Setting
Function (Purpose)	Used to set the specification (language display) for the destination. (Target models: AR-280/285/335) (Excluding the Japan models.)
Item	Specifications
Operation/ Procedure	Select the language to be used according to the table below.

Display	Language
ENG.(US)	English(US)
ENG.(UK)	English(UK)
FRENCH	French
SPANISH	Spanish
GERMAN	German

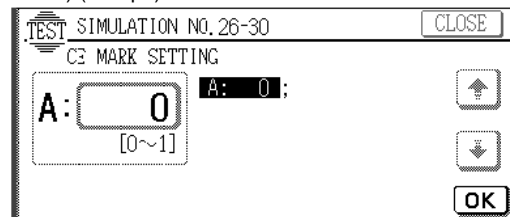
**26 - 30**

Purpose	Setting
Function (Purpose)	Used to set the CE mark conforming operation mode. (For flickers when driving the fusing heater lamp.)
Item	Specifications      Operation mode (Common)
Operation/ Procedure	Enter the number corresponding to the operation mode with the 10-key and press the [OK] key.

Set value	Content
0	CE mark control inhibit
1	CE mark control allowed (Default)

0: Normal operation heater lamp slow up control

1: CE mark standard complying operation (Heater lamp slow up control) (Europe)

**26 - 35**

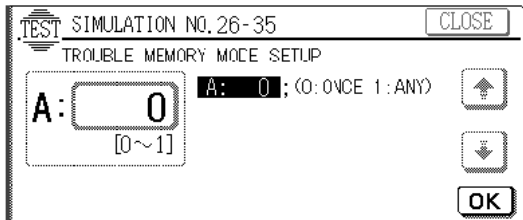
Purpose	Setting
Function (Purpose)	Used to set whether the trouble history display of SIM 22-4 is displayed as one trouble or as the number of continuous troubles when two or more troubles of a same kind occurred.
Item	Specifications

Operation/ Procedure	Used to set whether the trouble history display by SIM 22-4 is displayed as one trouble or as the accumulated number of continuous troubles when two or more troubles of same kind occur continuously.
-------------------------	--

Select the number corresponding to the display mode with the 10-key and press the [OK] key.

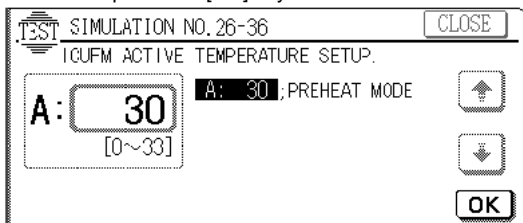
- 1: The trouble history display by SIM 22-4 is displayed as it is when two or more troubles occur continuously.
- 0: The trouble history display by SIM 22-4 is displayed as one trouble when two or more troubles occur continuously.

Default: 0



## 26 - 36

Purpose	Setting
Function (Purpose)	Used to set the ICU fan operating temperature. (Operation in pre-heat mode.) (Excluding Japan models.)
Section	ICU
Item	Operation
Operation/ Procedure	Used to set the threshold value of the ambient temperature for turning ON the ICU fan motor in the pre-heat mode. Set range : 0~33[°C] Default : 30[°C] (30) Enter the operating temperature with the 10-key pad and press the [OK] key.



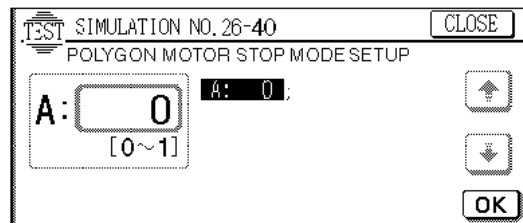
## 26 - 40

Purpose	Setting
Function (Purpose)	Polygon motor stop mode setup (AR-501/505) Used to set the stop time of the polygon motor after leaving in ready state and to set Enable/Disable of the setting. (Other models)
Item	Specifications
Operation/ Procedure	(AR-501/505) When this simulation is executed, the current set value is displayed.

At that time, the set value can be changed with the 10-key.  
When the OK key is pressed, the currently set value is stored in the EEPROM.

Default: 0

0	Normal mode	Control according to the setup in the silent mode by the user setup.
1	Silent mode	After completion of a job, the polygon motor is stopped in the time set in the silent mode of the user setup.



(Other models)

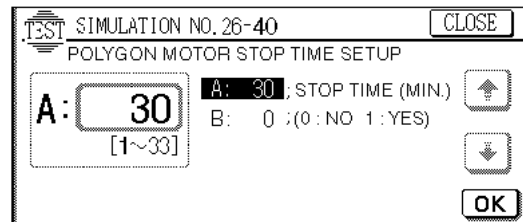
A

1. Used to set the time (minute) to stop the polygon motor with the 10-key.  
(Regardless of setting in B, the time can be freely set.)
2. Press the OK key to store the set time.
3. Press the CA key to reset. Only when B is set to "1: YES", the polygon motor is stopped in the set time.  
Set range: 1-30 min  
Default: 30 min

B Used to set YES/NO of the setup of A.

Default: 0 (NO)

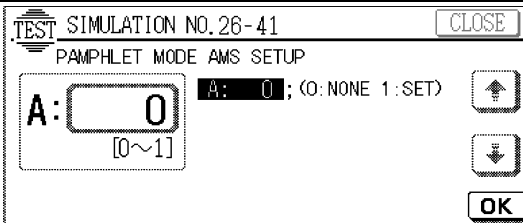
Set value	Content
0	NO (The currently set operation is performed.) → SP/FP does not stop. 40 NEW Stops in the default time (30 min).
1	Stops in the set value of A.



## 26 - 41

Purpose	Setting
Function (Purpose)	Used to enable/disable the auto magnification ratio select (AMS) function in the pamphlet copy mode.
Item	Specifications                      Operation mode (Common)
Operation/ Procedure	This simulation is used to enable or disable the automatic magnification ratio selection (AMS) in the pamphlet mode.

Set value	Set content
0	Automatic magnification ratio selection (AMS) is enabled.
1	Automatic magnification ratio selection (AMS) is disabled.



## 26 - 44

Purpose	Setting
Function (Purpose)	Used to set the model of the unit which is connected to the SCSI I/F of ICU PWB.
Section	ICU
Item	Specifications                      Interface/Communication

Operation/ Procedure	A is at the left of B when viewed from the rear side.
	0: No connection
	1: Printer controller
	3: External printer controller (Not used)
	4: Scanner controller (Not used)
	8: Tandem connection (Initiator)
	10: Tandem connection (Target)

One SCSI channel available (Japan only)

Two SCSI channels available  
(AR-501/505)

(Other models)

## 26 - 46

Purpose	Setting
Function (Purpose)	Used to set the image direction or not regardless of modes when the finisher/sorter is installed.
Item	Specifications Operation mode (Common)
Operation/ Procedure	This simulation is used to set the image direction or not regardless of modes when the finisher/sorter is installed. (Other models than AR-501/505)

Set value	Set content
0	Not set. (The image direction is changed in the staple mode of FN1*.)
1	Set. (The image direction is not changed regardless of presence of the staple.)

Default: 0

## 26 - 50

Purpose	Setting
Function (Purpose)	Used to set YES/NO of black/white reversion is allowed.
Item	Specifications
Operation/ Procedure	When this simulation is executed, the current set value is displayed. At that time, the set value can be changed with the 10-key.

When the OK key is pressed, the currently set value is stored in the EEPROM.

Default: 1 (YES) (Black/white reversion is allowed.)

0	NO: Black/white reversion is inhibited.
1	YES: Black/white reversion is allowed.

## 26 - 52

Function (Purpose)	Used to set whether white paper discharge count up is performed or not. ("White paper" means insertion paper in the OHP insertion paper mode (without copy), cover paper in the cover paper insertion mode (without copy)/back cover, and white paper in the duplex exit mode (CA etc.).)
Operation/ Procedure	When this simulation is executed, the current set value is displayed. Under this state, the set value can be changed with the 10-key.

When the OK key is pressed, the currently set value is stored in the EEPROM.

	Set value	Content
A	0	White paper count up is not performed.
	1	White paper count up is performed.

Destination	Default
U.K./Europe/Aus.	0 (Count up is not performed.)
Others	1 (Count up is performed.)

When set to 0 (count up is not performed), the following counters do not count up.

- COPIES counter
- Total counter
- Maintenance counter
- Developer counter
- Department management counter
- The signal (PNC) for the external auditor (mechanism counter) is not outputted.

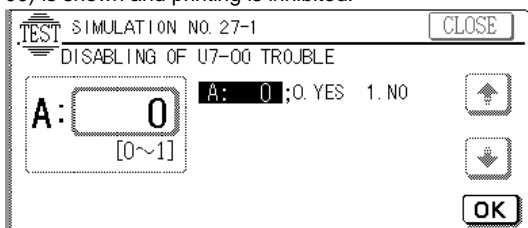
**27****27 - 1**

Purpose	Setting
Function (Purpose)	Used to set the operation specifications when a communication trouble occurs between the host computer and MODEM (on the copier). (When a communication trouble occurs between the host computer and MODEM (copier), the self diag display (U7-00) is printed and setting is made to select inhibit/allow of printing.)
Section	Communication unit (TEL/LIU/MODEM etc.)
Item	Specifications                      Operation mode (Common)
Operation/ Procedure	Enter the code number corresponding to the operation mode with the 10-key and press the [OK] key. Used to set Enable/Disable of U7-00 trouble detection.

Set value	Content
0	U7-00 trouble detection is disabled. (Default)
1	U7-00 trouble detection is enabled.

0: Though a communication trouble occurs between the host computer and the MODEM (machine side), the operation of the machine is not affected.

1: When a communication trouble occurs between the host computer and the MODEM (copier side), the self diag display (U7-00) is shown and printing is inhibited.

**27 - 2**

Purpose	Setting
Function (Purpose)	Used to set and change the host computer/MODEM numbers. (This setting is required when a communication is made between the copier and a computer through MODEM.)
Section	Communication unit (TEL/LIU/MODEM etc.)
Item	Data                      User data
Operation/ Procedure	1. Select the PC/MODEM(HOST#/TEL#) to be set or changed. The selected key is highlighted.)

2. Press the [OK] key.

The key is highlighted and inquiring of the present set number of the selected PC/MODEM is made to the host computer.

(When the number is supplied from the host normally.)

The present set number is displayed in the column of PRESENT (or no display is made if not registered) and the [OK] key at the upper right returns from the gray display to the normal display.

(In case of a trouble)

"Failed (U7-00)" is displayed in the column of PRESENT and the OK key at the lower right returns from the highlight display to the normal display.

3. When changing the number, enter the new number (max. 24 digits) with the 10-key and the following keys.

# : [P]((program) key

\* : [AUDIT CLEAR] ((Dept. count end) key

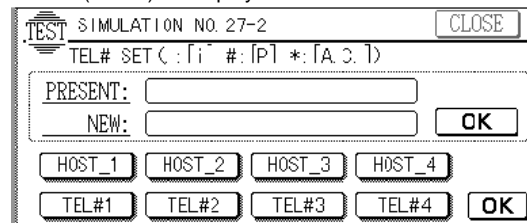
, : [i]((Information) key

4. When the [OK] key at the upper right is pressed, the newly set number for the selected PC/MODEM is registered.

(When registered normally)

The number displayed in the column of NEW disappears and the newly set number appears in the column of PRESENT (In case of a trouble)

"Failed (U7-00)" is displayed in the column of NEW.



Note For this setting, the copier and the host computer must be connected with a communication line (MODEM).

**27 - 3**

Purpose	Setting
Function (Purpose)	Used to set and change the ID numbers of the copier and the host computer/MODEM numbers. (This setting is required when a communication is made between the copier and a computer through MODEM.)
Section	Communication unit (TEL/LIU/MODEM etc.)
Item	Data                      User data
Operation/ Procedure	1. Select between PPC(copier) and PC/MODEM(host). The key is highlighted.

2. Press the [OK] key at the lower right. (The key is highlighted and an inquiry of the selected ID No. to the host.)

(When the number is supplied from the host normally)

The present set number is displayed in the column of PRESENT (or no display is made if not registered) and the [OK] key at the upper right returns from the gray display to the normal display.

(In case of a trouble)

"Failed (U7-00)" is displayed in the column of PRESENT and the OK key at the lower right returns from the highlight display to the normal display.

3. When changing the number, enter the new number (max. 24 digits) with the 10-key and the following keys.

X: [P](program) key

Y: [AUDIT CLEAR]((dept. count end) key

The entered number is displayed in the column of "NEW"

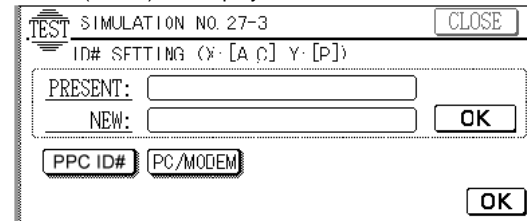
4. When the [OK] key at the upper right is pressed, the newly set ID number of the selected PC/MODEM is registered on the host side.

(When registered normally)

The number in the column of NEW disappears and the newly set and registered number appears in the column of PRESENT.

(In case of a trouble)

"Failed (U7-00)" is displayed in the column of NEW



Note For this setting, the copier and the host computer must be connected with a communication line (MODEM).

**27 - 4**

Purpose	Setting
Function (Purpose)	Used to enter the start time and the end time of servicing for management of service work. (The data can be checked by the host computer.)
Section	Communication unit (TEL/LIU/MODEM etc.)
Item	Data
Operation/ Procedure	1. Press the [SERVICE START]key when starting servicing. The key is highlighted.

- Press the [EXECUTE]key.  
The key is highlighted and the data on service start time is sent.
- Press the [SERVICE END]Key after completion of servicing.  
The key is highlighted.
- Press the [EXECUTE]key .  
The key is highlighted and the data on service end time is sent. When the host receives the data normally, "Complete" is highlighted.  
In case of a trouble, "Failed" is highlighted.

**Note** For this setting, the copier and the host computer must be connected with a communication line (MODEM).

**27 - 5**

Purpose	Setting
Function (Purpose)	Used to enter the TAG No. of the copier. (This simulation allows to check the machine TAG No. with the host computer.)
Section	Communication unit (TEL/LIU/MODEM etc.)
Item	Data
Operation/ Procedure	1. When entering the tag No. newly or changing the tag No. enter the value (max. 8 digits) with the 10-key. The entered number is displayed in the column of "NEW"

- Press the [OK] key.  
The new tag No. entered in procedure 1 is set.  
It is advisable to enter the machine's SER No. for machine management and servicing.

**Note** For this setting, the copier and the host computer must be connected with a communication line (MODEM).

**30****30 - 1**

Purpose	Operation test/check
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Function (Purpose)	Used to check the operation of sensors and detectors in the paper feed section, the paper transport section, and the paper exit section, and the related circuit.
Section	Others
Item	Operation
Operation/ Procedure	The operations of the sensors and detectors in the sections other than the paper feed section of the copier are displayed. The active sensors and detectors are highlighted.

DSWF	Copier front door open/close
DSWL	Copier left door
DSWLL	Copier left lower door
DSWR	Copier right door
DVCH1	Developing unit installation detection
DVCH2	Developing unit installation detection
DVCH3	Developing unit installation detection
DVCH4	Developing unit installation detection
PFD	Paper vertical transport sensor
PPD1	Paper transport sensor 1
PPD2	Paper transport sensor 2
PSD	Paper transport sensor
POD1	Paper exit sensor 1
POD2	Paper exit sensor 2
POD3	Paper exit sensor 3
TFD	Waste toner bottle full detection
TMS	Toner motor missing detection

(AR-501/505)

(Other models)

**30 - 2**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of sensors and detectors in the paper feed section and the related circuits. (The operations of sensors and detectors in the paper feed section can be monitored with the LCD.)
Section	Paper transport
Item	Operation
Operation/ Procedure	The operations of the sensors and detectors in the paper feed section of the copier are displayed. The active sensors and detectors are highlighted.

UCSS1	Copier upper tray paper size detection 1
UCSS2	Copier upper tray paper size detection 2
UCSS3	Copier upper tray paper size detection 3
UCSS4	Copier upper tray paper size detection 4
LUD1	Copier upper tray upper limit detection
PED1	Copier upper tray paper detection
UCSPD1	Copier upper tray paper size detection
LCSS1	Copier lower tray paper size detection 1

<b>LCSS2</b>	Copier lower tray paper size detection 2
<b>LCSS3</b>	Copier lower tray paper size detection 3
<b>LCSS4</b>	Copier lower tray paper size detection 4
<b>LUD2</b>	Copier lower tray paper detection
<b>PED2</b>	Copier lower tray paper detection
<b>LCSPD1</b>	Copier lower tray paper size detection
<b>MPLS1</b>	Manual tray length detection 1
<b>MPLS2</b>	Manual tray length detection 2
<b>MPLD1</b>	Manual feed paper length detection 1
<b>MPLD2</b>	Manual feed paper length detection 2
<b>MPED</b>	Manual tray paper empty detection
<b>A4/A3</b>	Manual tray (width only) detection size
<b>11x</b>	Manual tray (width only) detection size
<b>B5/B4</b>	Manual tray (width only) detection size
<b>8.5x</b>	Manual tray (width only) detection size
<b>A5/A4R</b>	Manual tray (width only) detection size
<b>B5R</b>	Manual tray (width only) detection size
<b>POSTCARD</b>	Manual tray (width only) detection size
<b>EXTRA</b>	Manual tray (width only) detection size

One of  
these is  
displayed

**TEST SIMULATION No. 30-2** [CLOSE]

TRAY SENSOR CHECK (MAIN)

UCSS1	UCSS2	UCSS3	UCSS4
LUD1	PED1	UCSPD	
LCSS1	LCSS2	LCSS3	LCSS4
LUD2	PED2	LCSPD	
MPLS1	MPLS2	MPLD1	MPLD2

1/2

**TEST SIMULATION No. 30-2** [CLOSE]

TRAY SENSOR CHECK (MAIN)

MPED			
A4/A3	LT/WLT	B5/B4	INV/LTR
A5/A4R	B5R	POSTCARD	EXTRA

2/2

## 40

### 40 - 1

<b>Purpose</b>	Operation test/check																								
<b>Function (Purpose)</b>	Used to check the operation of the manual paper feed tray paper size detector and the related circuit. (The operation of the manual paper feed tray paper size detector can be monitored with the LCD.)																								
<b>Section</b>	Paper transport																								
<b>Item</b>	Operation																								
<b>Operation/Procedure</b>	The operations of the sensors and detectors in the manual paper feed section are displayed. The active sensors and detectors are highlighted.																								
	<table> <tr><td><b>MPLS1</b></td><td>Manual tray length detection 1</td></tr> <tr><td><b>MPLS2</b></td><td>Manual tray length detection 2</td></tr> <tr><td><b>MPLD1</b></td><td>Manual feed paper length detection 1</td></tr> <tr><td><b>MPLD2</b></td><td>Manual feed paper length detection 2</td></tr> <tr><td><b>A4/A3</b></td><td>Manual tray (width only) detection size</td></tr> <tr><td><b>11x</b></td><td>Manual tray (width only) detection size</td></tr> <tr><td><b>B5/B4</b></td><td>Manual tray (width only) detection size</td></tr> <tr><td><b>8.5x</b></td><td>Manual tray (width only) detection size</td></tr> <tr><td><b>A5/A4R</b></td><td>Manual tray (width only) detection size</td></tr> <tr><td><b>B5R</b></td><td>Manual tray (width only) detection size</td></tr> <tr><td><b>POSTCARD</b></td><td>Manual tray (width only) detection size</td></tr> <tr><td><b>EXTRA</b></td><td>Manual tray (width only) detection size</td></tr> </table>	<b>MPLS1</b>	Manual tray length detection 1	<b>MPLS2</b>	Manual tray length detection 2	<b>MPLD1</b>	Manual feed paper length detection 1	<b>MPLD2</b>	Manual feed paper length detection 2	<b>A4/A3</b>	Manual tray (width only) detection size	<b>11x</b>	Manual tray (width only) detection size	<b>B5/B4</b>	Manual tray (width only) detection size	<b>8.5x</b>	Manual tray (width only) detection size	<b>A5/A4R</b>	Manual tray (width only) detection size	<b>B5R</b>	Manual tray (width only) detection size	<b>POSTCARD</b>	Manual tray (width only) detection size	<b>EXTRA</b>	Manual tray (width only) detection size
<b>MPLS1</b>	Manual tray length detection 1																								
<b>MPLS2</b>	Manual tray length detection 2																								
<b>MPLD1</b>	Manual feed paper length detection 1																								
<b>MPLD2</b>	Manual feed paper length detection 2																								
<b>A4/A3</b>	Manual tray (width only) detection size																								
<b>11x</b>	Manual tray (width only) detection size																								
<b>B5/B4</b>	Manual tray (width only) detection size																								
<b>8.5x</b>	Manual tray (width only) detection size																								
<b>A5/A4R</b>	Manual tray (width only) detection size																								
<b>B5R</b>	Manual tray (width only) detection size																								
<b>POSTCARD</b>	Manual tray (width only) detection size																								
<b>EXTRA</b>	Manual tray (width only) detection size																								

One of  
these is  
displayed.

**TEST SIMULATION No. 40-1** [CLOSE]

MAIN UNIT SENSOR CHECK

MPLS1	MPLS2	MPLD1	MPLD2
A4/A3	LT/WLT	B5/B4	INV/LTR
A5/A4R	B5R	POSTCARD	EXTRA

1/1

### 40 - 2

<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the manual paper feed tray paper width detector detection level.
<b>Section</b>	Paper transport
<b>Item</b>	Operation
<b>Operation/Procedure</b>	1. Open the manual paper feed guide at maximum. 2. Press the [MAX POSITION] key.

- Press the [EXECUTE] key.  
The [EXECUTE] key is highlighted then it returns to the normal display.  
The manual paper feed guide max. width position detection level is recognized.
- Open the manual paper feed guide at minimum.
- Press the [MIN POSITION] key.
- Press the [EXECUTE] key.  
The key is highlighted then it returns to the normal display.  
The manual paper feed guide min. position detection level is recognized.

If the above operation is not performed properly, the ERROR display is highlighted.  
If performed properly, the above data is stored and the COMPLETE is highlighted.

**TEST SIMULATION No. 40-2** [CLOSE]

SELECT POSITION AND EXECUTE ON

1. MAX POSITION	2. MIN POSIT ON
COMPLETE	ERROR
EXECUTE	

1/1

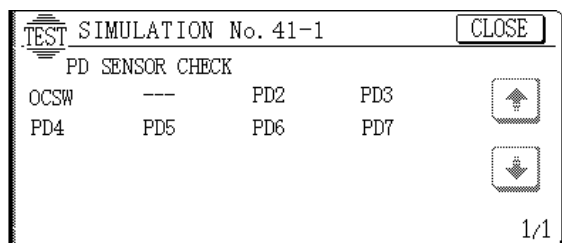
## 41

### 41 - 1

<b>Purpose</b>	Operation test/check/Operation data output/Check (Display/Print)
<b>Function (Purpose)</b>	Used to check the operation of the document size sensor and the related circuit. (The operation of the document size sensor can be monitored with the LCD.)
<b>Section</b>	Others
<b>Item</b>	Operation
<b>Operation/Procedure</b>	The operations of the sensors and detectors in the document size detection section are displayed. The active sensors and detectors are highlighted.

OCSW	Document cover state	Normal display: Open	Highlighted display: Close
PD*	Document sensor	Normal display: Document empty	Highlighted display: Document exist



**41 - 2**

Purpose	Adjustment
Function (Purpose)	Used to adjust the document size sensor detection level.
Section	Others
Item	Operation
Operation/ Procedure	1. Open the original table, and press the [EXECUTE] key with no original on the original table. The sensor level setting with no original on the table is performed.

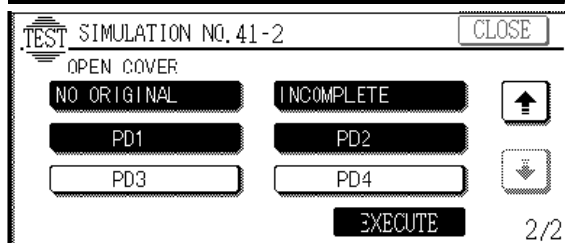
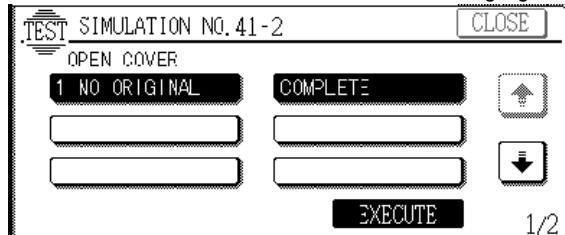
(Normal case) The COMPLETE display is highlighted (for 1 sec), then it returns to the normal display.

(Abnormal case) The INCOMPLETE display and the abnormal sensor name are highlighted.

2. Set an A3 paper (11" x 17") and press the [EXECUTE] key. The sensor level setting with original is performed.

(Normal case) The COMPLETE display is highlighted (for 1 sec), then it returns to the normal display. The "NO ORIGINAL" display turns to "A3 ORIGINAL".

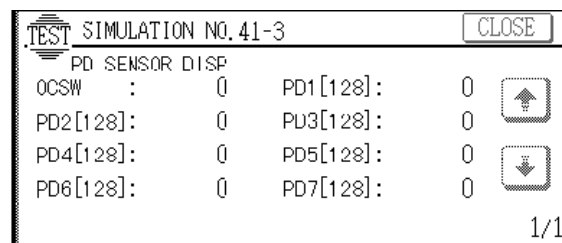
(Abnormal case) The INCOMPLETE display and the abnormal sensor names are highlighted.

**41 - 3**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the document size sensor and the related circuit. (The document size sensor output level can be monitored with the LCD.)
Section	Others
Item	Operation
Operation/ Procedure	The detection output level of each sensor is displayed in real time.

OCSW	Document cover state
PD*	Document sensor

\* The value in [ ] shown at the right of each sensor name is the threshold value.

**43****43 - 1**

Purpose	Setting
Function (Purpose)	Used to set the fusing temperature in each operation mode.
Section	Fixing (Fusing)
Item	Operation
Operation/ Procedure	1. Select the kind of lamps and the operation mode with [↑], [↓] keys.

2. Enter the set value with the 10-key.

3. Press the [OK] key to set the fusing temperature set in procedure 2.

Used to set the fusing temperature in the normal mode and in the power save mode.

**INSIDE NORMAL:** The control temperature in the normal mode and when the center lamp is heated. (190) (AR-501/505 (200))

**OUTSIDE NORMAL:** The control temperature in the power save mode (pre-heat mode) and the side lamps are heated. (190) (AR-501/505 (200))

**INSIDE PREHEAT:** The control temperature in the manual copy mode when the center lamp is heated. (\*1)

**OUTSIDE PREHEAT:** The control temperature in the manual copy mode when the side lamps are heated. (\*2)

**INSIDE MFT:** The control temperature in the manual copy mode when the center lamp is heated. (200)

**OUTSIDE MFT:** The control temperature in the manual copy mode when the side lamps are heated. (200)

( ): Default

Destination	Pre-heat mode fusing temperature set value		
	MODEL		
	AR-230/280/285 series AR-2X1/2X6/3X1/250 series	AR-330/335 series AR-3X6 series	AR-4XX series AR-501/505
U.S.A. (Inch)	125	130	140
Canada (Inch)	125	130	140
Other (Inch)	125	130	140
Japan	130	130	140
Other (AB)	125	130	140
Europe (AB)	110	130	140
U.K. (AB)	110	130	140
Aus. (AB)	110	130	140

TEST SIMULATION NO. 43-1 CLOSE

FUSER TEMPERATURE SETUP

A: 190 [165~200]

A: 190 ; INSIDE NORMAL

B: 190 ; OUTSIDE NORMAL

C: 140 ; INSIDE PREHEAT

D: 140 ; OUTSIDE PREHEAT

E: 200 ; INSIDE MFT

F: 200 ; OUTSIDE MFT

OK

**Note** Be sure to set to the default value. If not, a trouble may occur.

**43 - 3**

**Function (Purpose)** Used to adjust the fusing motor speed. (AR-501/505 only)

**Operation/ Procedure** When this simulation is executed, the current set value is displayed. Under this state, the set value can be changed by pressing the 10-key. When [OK] key is pressed, the set value is stored in the EEPROM.

Adjustment value	70	100	130
Speed	97%	100%	103%

An increase in the adjustment value by 1 corresponds to an increase in the speed by 0.1%

A decrease in the adjustment value by 1 corresponds to a decrease in the speed by 0.1%

TEST SIMULATION NO. 43-3 CLOSE

FUSER MOTOR SPEED ADJUSTMENT

A: 100 [70~130]

A: 100

OK

**43 - 8**

**Function (Purpose)** Used to set the time to rotate the fusing motor after reaching the set temperature in warming up. (AR-501/505 only)

**Operation/ Procedure** When this simulation is executed, the current set value is displayed. Under this state, the set value can be changed by pressing the 10-key. When [OK] key is pressed, the set value is stored in the EEPROM.

Set range: 10 – 120 sec

Default: Varies according to the destination setup (SIM 26-6).

Japan: 30 sec

EX Japan: Varies according to the destination.

TEST SIMULATION NO. 43-8 CLOSE

FUM PRELIMINARY OPERATION TIME

A: 30 [10~120]

A: 30 [SEC.]

OK

**44****44 - 1**

**Purpose** Setting

**Function (Purpose)** Used to set whether the correction functions of the image forming (process) section are valid or not.

<b>Section</b>	Image process (Photoconductor/Developing/Transfer/Cleaning)
<b>Item</b>	Operation
<b>Operation/ Procedure</b>	Enter the code number corresponding to each correction operation with the 10-key and press the OK key.

To enable all the correction functions, set to 3.

(Note) The default setting must be 3.

Set value	Developing bias voltage correction limit	OPC drum sensitivity correction
0	Disable	Disable
1	Disable	Enable
2	Enable	Disable
3	Enable	Enable

TEST SIMULATION NO. 44-1 CLOSE

CORRECTION MODE SETTING

A: 3 [0~3]

A: 3

OK

**Note** (Note) It must be set to the default 3.

**44 - 2**

**Purpose** Adjustment

**Function (Purpose)** Used to adjust the sensitivity (gain) of the OPC drum mark sensor and the image density sensor.

**Section** Image process Photo conductor  
(Photoconductor/Developing/Transfer/Cleaning)

**Item** Operation

**Operation/ Procedure** When the [EXECUTE] key is pressed, it is highlighted and the main motor rotates to start the drum marking sensor and the image density sensor gain adjustment. (The adjustment is automatically performed.)

After completion of the adjustment, the [EXECUTE] key returns to the normal display and the main motor stops.

At that time, the gain level of each sensor is displayed.

If the adjustment is not completed properly, the ERROR display is shown.

**DMLED:** Drum marking sensor gain adjustment value

**PCLED:** Image density sensor gain adjustment value

**DRUM:** Kinds of drums

0: Others

1: AR330DR/AR336DR/AR336DM/ARdR23; 10mm

2: AR330DM/ARdR17; 3 x 4 x 3mm

3: AR400DR/AR400DM; 15mm

5: AR500DR/AR500DM/ARdR25; 5mm

As other models except AR-501/505 do not recognize 5mm marking, "0" is displayed at that time.

TEST SIMULATION NO. 44-2 CLOSE

PROCON GAIN ADJUSTMENT

DMLED : 0

PCLED : 0

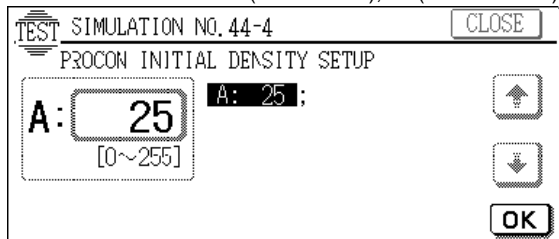
DRUM : 1

EXECUTE

**44 - 4**

Purpose	Setting
Function (Purpose)	Used to set the target image (reference) density level in the developing bias voltage correction.
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)
Item	Data Adjust/Setting data
Operation/Procedure	1. Enter the set value (38) with the 10-key. 2. Press the [OK] key. (The value entered in procedure 1 is set.)

Set value: 36 (AR-501/505), 38 (Other models)



Note	It must be set to 36 for AR-501/505 or 38 for other models.
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**44 - 5**

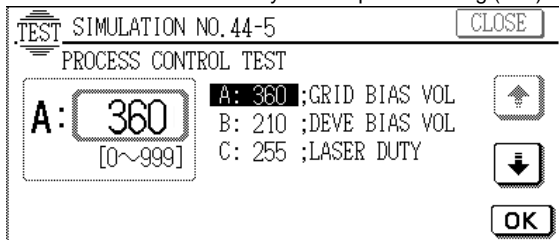
Purpose	Setting
Function (Purpose)	Used to set various parameters (main charger grid voltage, laser beam power, correction start developing bias voltage) in developing bias correction.
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)
Item	Operation
Operation/Procedure	1. Select the parameter mode with [↑], [↓] keys. 2. Enter the parameter with the 10-key.

3. Press the [OK] key. (The value entered in procedure 2 is set.)

**GRID BIAS VOL:** Reference charging voltage level in patch forming (AR-501/505; 360), other models; 380) (Set value)

**DEVE BIAS VOL :** Reference developing bias voltage level in patch forming (210) (Set value)

**LASER DUTY:** Laser duty level in patch forming (255)



Note	Be sure to set to the specified value. If not, the print image density may be disturbed.
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**44 - 9**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the data on the result of the image forming section correction (process correction) (the corrected main charger grid voltage in each print mode, developing bias voltage, the laser power, etc.) (This simulation allows to check whether the correction is executed properly or not.)
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)

Item	Data	Operation data (Machine condition)
Operation/Procedure	Used to display the drum rotating time and the high voltage output in each copy mode and the laser power correction power.	

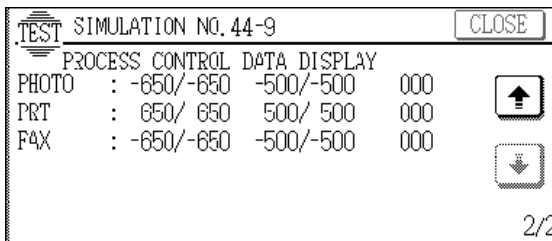
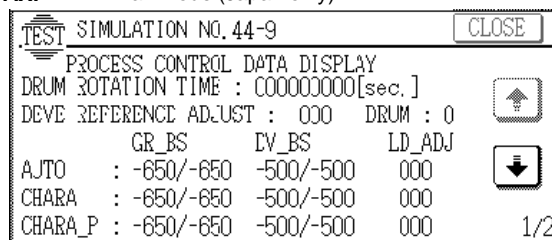
(AR-250/280/281/285/286/335/336/405)

**DRUM ROTATION:** Drum rotating time (sec)**DEVE REFERENCE ADJUST:** Toner concentration correction amount

**DRUM:** Drum identification result  
 0: Others  
 1: AR330DR/AR336DR/AR336DM/ARdR23; 10mm  
 2: AR330DM/ARdR17; 3 x 4 x 3mm  
 3: AR400DR/AR400DM; 15mm  
 5: AR500DR/AR500DM/ARdR25; 5mm  
 As other models except AR-501/505 do not recognize 5mm marking, "0" is displayed at that time.

**GR\_BS:** Main charger grid voltage level (\*1)

**DV\_BS:** Developing bias voltage level (\*1)  
 (Display) \*1 : Sim 8-1, 8-2 Set voltage/actual output voltage (including corrected amount)

**LD\_AD:** Laser power correction power display (mW)**AUTO:** Auto mode**CHARA:** Character mode**CHARA\_P:** Character/photo mode**PHOTO:** Photo mode**PRT:** Printer mode**FAX:** Fax mode (Japan only)

(AR-501/505)

**DRUM ROTATION:** Drum rotating time (sec)**DEVE MIXING TIME:** Developer rotating time (sec)**DEVE REFERENCE ADJUST A:** Toner concentration correction amount**DEVE REFERENCE ADJUST B:** Toner concentration correction amount

**DRUM:** Drum identification result  
 0: Others  
 1: AR330DR/AR336DR/AR336DM/ARdR23; 10mm  
 2: AR330DM/ARdR17; 3 x 4 x 3mm  
 3: AR400DR/AR400DM; 15mm  
 5: AR500DR/AR500DM/ARdR25; 5mm  
 As other models except AR-501/505 do not recognize 5mm marking, "0" is displayed at that time.

**GR\_BS:** Main charger grid voltage level (\*1)

**DV\_BS:** Developing bias voltage level (\*1)  
 (Display) \*1 : Sim 8-1, 8-2 Set voltage/actual output voltage (including corrected amount)

**LD\_AD:** Laser power correction power display (mW)  
**AUTO:** Auto mode  
**CHARA:** Character mode  
**CHARA\_P:** Character/photo mode  
**PHOTO:** Photo mode  
**PRT:** Printer mode  
**FAX:** Fax mode (Japan only)

TEST SIMULATION NO.44-9			CLOSE
PROCESS CONTROL DATA DISPLAY			
DRUM ROTATION TIME : 000000000[sec.]			
DEVE MIXING TIME : 000000000[sec.]			
DEVE REFERENCE ADJUST A : 000 DRUM : 0			
DEVE REFERENCE ADJUST B : 000			
	GR_BS	DV_BS	LD_ADJ
AUTO	: -650/-650	-500/-500	000 1/2

TEST SIMULATION NO.44-9			CLOSE
PROCESS CONTROL DATA DISPLAY			
CHARA	: -650/-650	-500/-500	000
CHARA_P	: -650/-650	-500/-500	000
PHOTO	: -650/-650	-500/-500	000
PRT	: -650/-650	-500/-500	000

**44 - 12**

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the toner image patch density data in correction operation of the image forming section. (This simulation allows to check whether the correction is executed properly or not. )
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)
Item	Data Operation data (Machine condition)
Operation/ Procedure	The latest developing bias correction data is displayed. The sensor detection level (density) in the toner image patch section/OPC drum base during the developing bias correction is displayed.

<b>DMLED:</b>	Drum marking sensor gain adjustment level
<b>PCLED:</b>	Image density sensor gain adjustment level
<b>DV_BS:</b>	The developing bias voltage level when forming PT2/BS2 of ID (1)
<b>PT1/BS1:</b>	No. 1 toner image patch section/Drum base sensor detection level
<b>PT2/BS2:</b>	No. 2 toner image patch section/Drum base sensor detection level
<b>PT3/BS3:</b>	No. 3 toner image patch section/Drum base sensor detection level

ID (n) : Sequence number of correction operation

TEST SIMULATION NO. 44-12				CLOSE
DM DATA, PATCH/BASE DATA DISPLAY				
DMLED : 000	PCLED : 000	DV_BS : 000		
PT1/BS1	PT2/BS2	PT3/BS3		
ID(1) : 000/000	000/000	000/000		
ID(2) : 000/000	000/000	000/000		
ID(3) : 000/000	000/000	000/000		
ID(4) : 000/000	000/000	000/000	1/2	

**44 - 15**

Purpose	Setting
Function (Purpose)	Used to set the correction values of various parameters (maincharger grid voltage, laser beam power, developing bias voltage) in the image forming operation and image forming section correction for OPC drum type A. (AR-250/280/281/285/286/335/336/405 only)
Section	Image process (Photoconductor/Developing/Transfer/ Cleaning)
Item	Operation
Operation/ Procedure	Used to set various parameters of image forming operation and image forming section correction operation for drum type A.

1. Select the correction item with [↑], [↓] keys.
2. Enter the set value with the 10-key
3. Press the [OK] key. (The value entered in procedure 2 is set.)

<b>DV BIAS:</b>	Developing bias base voltage (Equivalent to SIM 8-1 for Drum type B.) (500)
<b>GIRD BIAS:</b>	Main charger grid voltage (Equivalent to SIM 8-2 for drum type B.) (475)
<b>LD POWER:</b>	Laser power (Equivalent to SIM 61-2 for drum type B.) For AR-2X1/3X1/4XX/250/XX6 series, set to "10" (default). For AR-230/250/285/330/335 series, set to "16."

**PROCON DB:** Base developing bias voltage in toner image patch forming (in developing bias correction) (Equivalent to SIM 44-5B) (500) (Correction value to SIM 44-5B)

**PROCON GB:** Base main charger grid voltage (Equivalent to SIM 44-5A in drum type B) (500)  
(Correction value to SIM 44-5A)

**PROCON TARGET:** Target image (reference) density level in  
developing bias voltage correction  
(Equivalent to SIM 44-4 4 in drum type B)  
(58)

Be sure to set to the specified value.

TEST SIMULATION NO.44-15

DRUM CONTROL SET UP

A: 500 [0~1000]

B: 500 ;DV BIAS

C: 16 ;GRID BIAS

D: 500 ;LD POWER

E: 500 ;PROCON DB

F: 58 ;PROCON GB

F: 58 ;PROCON TARGET

CLOSE

up arrow

down arrow

OK

Note	Be sure to set to the specified value. If not, the print image density may be disturbed.
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## 46

<b>46</b> - 2	
Purpose	Adjustment
Function (Purpose)	Used to adjust the copy density in the copy mode (binary/multi-value - auto, character and photo, photo mode). (The overall print density in each mode (all of the specified density set for each density level (display value)) can be adjusted in each mode.)
Item	Picture quality                      Density
Operation/ Procedure	1. Select the print mode with [ $\uparrow$ ], [ $\downarrow$ ] keys. (The set value is highlighted.)

2. Enter the adjustment value with the 10-key.

3. Press the [OK] key or the PRINT button.

The value entered in procedure 2 is set.

When the PRINT key is pressed, copying is performed.

(Note) When a set value (density adjustment value in density level 3) in the left column of the table below is changed with this simulation, the set value (the overall density level set value) in the right column is changed accordingly.

The parameters of the right and the left simulations and their adjustment items are the adjustment values in the same print mode.

The result of adjustment by the simulation executed at the last is reflected in actual printing.

The print density is normally adjusted by SIM 46-2.

To customize the print density for the density level display value according to the user's request, use the simulation in the right column. (Excluding auto mode)

(AR-230/280/285/330/335 series)

Binary mode

Set with SIM 46-2. Parameter to be changed	Linked simulation data
AE3.0 (AE)	
CH3.0 (Character)	Sim 46-9
MIX3.0 (Character/Photo)	Sim 46-10
PH3.0 (Photo)	Sim 46-11

Default: 100

(AR-2X1/3X1/4XX/250/XX6 series)

	Set with SIM 46-2. Parameter to be changed	Linked simulation data
A	AE3.0 (AE)	
B	CH3.0 (Character)	Sim 46-9
C	MIX3.0 (Character/Photo)	Sim 46-10
D	PH3.0 (2)	Sim 46-11 (Photo error diffusion)
E	PH3.0 (256)	Sim 46-7 (Photo multi value dither) (Japan only)

\* For EX, the above value E is disabled.

(AR-501/505)

	Set with SIM 46-2. Parameter to be changed	Linked simulation data
A	AE3.0 (AE)	
B	CH3.0 (Character)	Sim 46-9
C	MIX3.0 (Character/Photo)	Sim 46-10
D	PH3.0 (2)	Sim 46-11 (Photo error diffusion)

## 46 - 3

Purpose	Adjustment
Function (Purpose)	Used to adjust the copy density in the copy mode (multi value-auto, character and photo, photo mode). (The overall print density in each mode (all of the specified density set for each density level (display value)) can be adjusted in each mode.) (AR-250/280/285/330/335 only) (Japan only)
Item	Picture quality      Density
Operation/ Procedure	1. Select the print mode with [↑], [↓] key. (The set value is highlighted.)  2. Enter the adjustment value with the 10-key.

3. Press the [OK] key or the PRINT button. (The value entered in procedure 2 is set.) When the PRINT button is pressed, copying is performed.

(Note) When a set value (density adjustment value in density level 3) in the left column of the table below is changed with this simulation, the set value (the overall density level set value) in the right column is changed accordingly.

The parameters of the right and the left simulations and their adjustment items are the adjustment values in the same print mode.

The parameters of the right and the left simulations and their adjustment items are the adjustment values in the same print mode. The result of adjustment by the simulation executed at the last is reflected in actual printing.

The print density is normally adjusted by SIM 46-2.

To customize the print density for the density level display value according to the user's request, use the simulation in the right column. (Excluding auto mode/SIM 46-4.)

(Multi value mode)

Sim46-3 Parameter set/changed by SM 46-3	Linked simulation data
AE3.0 (AE)	
CH3.0(Character)	Sim46-5
MIX3.0(Character/photo)	Sim46-6
PH3.0(Photo)	Sim46-7

Default: 100

**46 - 5**

Purpose	Adjustment
Function (Purpose)	Used to adjust the print density for each density level (display value) in the copy mode (multi Auto mode). An arbitrary print density can be set for each density level (display value). (AR-250/280/285/330/335 only) (Japan only)
Item	Picture quality                      Density
Operation/ Procedure	1. Select the density level with the density adjustment key. (The selected value is highlighted.) 2. Enter the adjustment value with the 10-key. 3. Press the ENTER key or the PRINT button. (The value entered in procedure 2 is set.)

When the PRINT button is pressed, copying is performed.

To customize the print density for the density level display value according to the user's request, use this simulation.

Default: 100

**46 - 6**

Purpose	Adjustment
Function (Purpose)	Used to adjust the print density for each density level (display value) in the copy mode (multi value-character, photo mode). An arbitrary print density can be set for each density level (display value). (AR-250/280/285/330/335 only) (Japan only)
Item	Picture quality                      Density
Operation/ Procedure	1. Select the density level with the density adjustment key. (The selected value is highlighted.) 2. Enter the adjustment value with the 10-key. 3. Press the ENTER key or the PRINT button. (The value entered in procedure 2 is set.)

When the PRINT button is pressed, copying is performed.

To customize the print density for the density level display value according to the user's request, use this simulation.

Default: 100

**46 - 7**

Purpose	Adjustment
Function (Purpose)	Used to adjust the print density for each density level (display value) in the copy mode (multi value - photo mode). (Japan only)

Item	Picture quality                      Density
Operation/ Procedure	1. Select the density level with the density adjustment key. (The selected value is highlighted.) 2. Enter the adjustment value with the 10-key. 3. Press the [ENTER] key or the [PRINT button]. (The value entered in procedure 2 is set.)

When the [PRINT button] is pressed, copying is performed.

To customize the print density for the density level display value according to the user's request, use this simulation.

Default: 100

**46 - 9**

Purpose	Adjustment
Function (Purpose)	Used to adjust the print density for each density level (display value) in the copy mode (binary - character mode).
Item	Picture quality                      Density
Operation/ Procedure	1. Select the density level with the density adjustment key. (The selected value is highlighted.) 2. Enter the adjustment value with the 10-key. 3. Press the ENTER key or the PRINT button. (The value entered in procedure 2 is set.)

When the PRINT button is pressed, copying is performed.

To customize the print density for the density level display value according to the user's request, use this simulation.

Default: 100

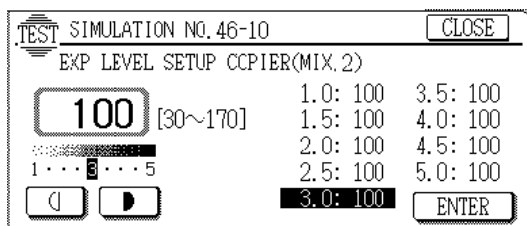
**46 - 10**

Purpose	Adjustment
Function (Purpose)	Used to adjust the print density for each density level (display value) in the copy mode (binary - character, photo mode). An arbitrary print density can be set for each density level (display value).
Item	Picture quality
Operation/ Procedure	1. Select the print mode with [↑], [↓] keys. (The set value is highlighted.) 2. Enter the adjustment value with the 10-key. 3. Press the [OK] key or the PRINT button. (The value entered in procedure 2 is set.)

When the PRINT button is pressed, copying is performed.

To customize the print density in each mode according to the user's request, use this simulation to adjust the print density.

Default: 100

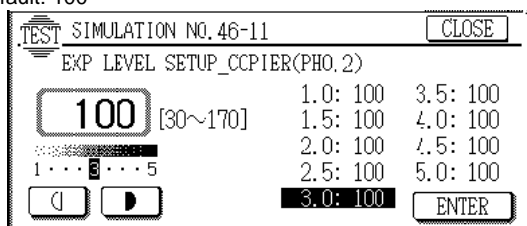
**46 - 11**

Purpose	Adjustment
Function (Purpose)	Used to adjust the print density for each density level (display value) in the copy mode (binary - photo mode). An arbitrary print density can be set for each density level (display value).
Item	Picture quality      Density
Operation/ Procedure	1. Select the print mode with [ $\uparrow$ ], [ $\downarrow$ ] keys. (The set value is highlighted.)

2. Enter the adjustment value with the 10-key.
3. Press the [OK] key or the PRINT button. (The value entered in procedure 2 is set.)  
When the PRINT button is pressed, copying is performed.

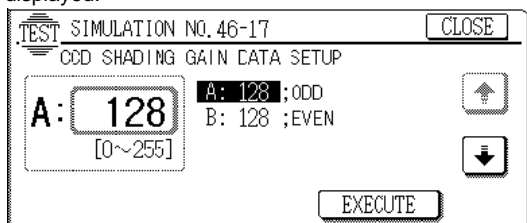
To customize the print density in each mode according to the user's request, use this simulation to adjust the print density.

Default: 100

**46 - 17**

Purpose	Setting/Operation data output/Check (Display/Print)
Function (Purpose)	Used to execute shading correction and display the correction value.
Item	Operation
Operation/ Procedure	1. Select the set item with [ $\uparrow$ ], [ $\downarrow$ ] keys. (The selected item is highlighted.)

2. Press the [EXECUTE] key.  
The shading correction is executed and the correction value is displayed.

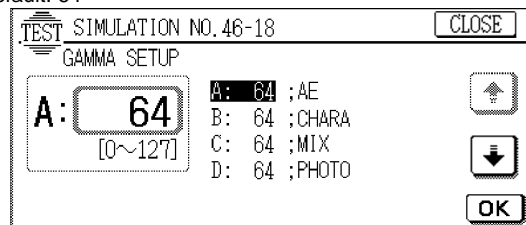
**46 - 18**

Purpose	Adjustment
Function (Purpose)	Used to adjust $\gamma$ (density gradient) in each copy mode. (Target models: AR-2X1/3X1/4XX/250/XX6/5XX series)
Item	Picture quality      Density
Operation/ Procedure	1. Select the print mode with [ $\uparrow$ ] key or [ $\downarrow$ ] key. (The display of the set value is highlighted.)

2. Enter the adjustment value with the 10-key.
  3. Press the [OK] key or the [PRINT] key.  
The value entered in procedure 2 is set.  
If the [PRINT] key is pressed, copying is performed.
- With the following setting, the density gradient ( $\gamma$ ) can be changed.

- A: Auto exposure mode (Center 64, 0 ~ 127)  
B: Character mode (Center 64, 0 ~ 127)  
C: Character, Photo mode (Center 64, 0 ~ 127)  
D: Photo mode (Error diffusion) (Center 64, 0 ~ 127)
- (Note) The greater the value is, the greater the inclination is.

Default: 64

**46 - 19**

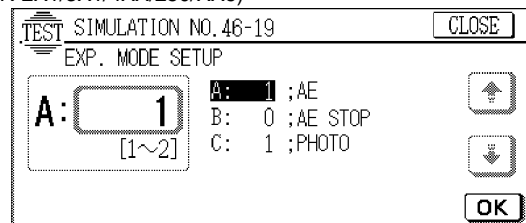
Purpose	Adjustment
Function (Purpose)	Used to adjust $\gamma$ (density gradient) and set the density detection area in the auto copy mode and to set the image process mode in the photo copy mode. (Target models: AR-2X1/3X1/4XX/250/XX6/5XX series)
Item	Picture quality      Density
Operation/ Procedure	1. Select the desired mode with [ $\uparrow$ ] key or [ $\downarrow$ ] key. (The display of the set value is highlighted.)

2. Enter the value with the 10-key.
  3. Press the [OK] key or the [PRINT] key.  
The value entered in procedure 2 is set.
- A: Auto exposure mode setting  
1: Picture quality priority mode  
2: Toner consumption priority mode
- (Default: Japan = 1, EX = 2)
- B: Auto exposure (Density detection) mode setting  
0: OFF (All surface density detection)  
1: ON (Image lead edge section density detection)
- (Default: 0) (AR-2X1/3X1/4XX/250/XX6 series only)
- C: Photo mode image process setting  
1: Memory dither 8x8 mode  
2: Memory dither 8x8 mode  
3: Error diffusion photo mode

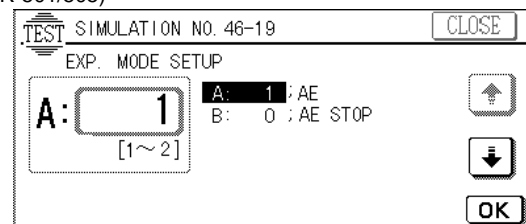
(Default: Japan = 1, EX = 3)

(Note) Except for Japan, the above C is fixed to "3."

(AR-2X1/3X1/4XX/250/XX6)



(AR-501/505)



**46 - 20**

Purpose	Adjustment
Function (Purpose)	Used to adjust the copy density correction in the SPF copy mode for the document table copy mode. Adjustment is made so that the copy density is the same as that in the document table copy mode. (Target models: AR-2X1/3X1/4XX/250/XX6/5XX series)
Item	Picture quality      Density
Operation/Procedure	1. Select the print mode with [↑] key or [↓] key. (The display of the set value is highlighted.)

2. Enter the adjustment value with the 10-key.
3. Press the [OK] key or the [PRINT] key.  
(The value entered in procedure 2 is set.)

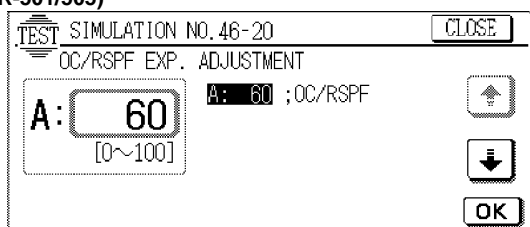
A: OC/SPF exposure correction value

Set range: 0 ~ 100

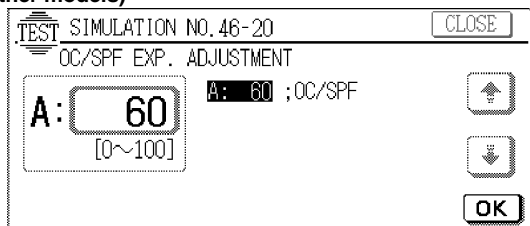
Center value: 50

(Default: 60)

(AR-501/505)



(Other models)

**48****48 - 1**

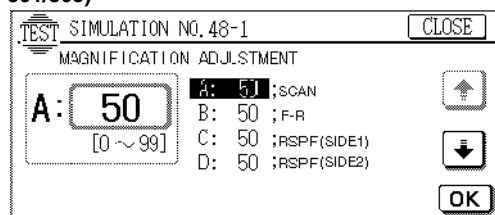
Purpose	Adjustment
Function (Purpose)	Used to adjust the copy magnification ratio (main scanning direction, sub scanning direction).
Section	ICU
Item	Picture quality
Operation/Procedure	1. Select the adjustment mode with [↑], [↓] keys. 2. Enter the adjustment value with the 10-key.

3. Press the [OK] key.  
The value entered in procedure 2 is set.
  - a. Sub scan direction magnification ratio --- (SCAN)  
The horizontal print magnification ratio (in the paper transport direction) of the image is adjusted by changing the scan speed in the paper transport direction.
  - b. Main scan direction magnification ratio --- (F-R)  
The vertical print magnification ratio (front frame to near frame) is adjusted in the image process section by the software operation.
  - c. Sub scan direction magnification ratio adjustment value (When SPF is used) --- (SPF)  
(When RSPF is used) --- (RSPF (SIDE1))  
The horizontal print magnification ratio (in the paper transport direction) is adjusted by changing the document transport speed.

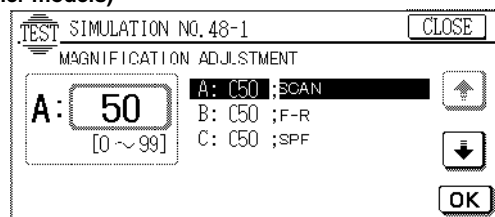
- d. Sub scan direction magnification ratio adjustment value (When RSPF is used) --- (RSPF (SIDE2))  
The horizontal print magnification ratio (in the paper transport direction) is adjusted by changing the document transport speed.  
(When the set value is changed by 1, the magnification ratio is changed by about 0.1%.)

Default: 50

(AR-501/505)



(Other models)

**50****50 - 1**

Purpose	Adjustment
Function (Purpose)	Used to adjust the copy image position and the void area (image loss) on the print paper in the copy mode. (The same adjustment can be made with SIM 50-2 (simple method).)
Item	Picture quality      Image position
Operation/Procedure	1. Select the adjustment item with [↑] [↓] keys. 2. Enter the adjustment value with the 10-key.

3. Press the [OK] key. (The adjustment value entered in procedure 2 is set.)

(RRC-A)

This set value is used to align the document image lead edge and the scan image data lead edge in the document table scan mode.

After starting scanning, the image lead edge position is determined by using the scanner home position detection signal (MHPS) OFF timing as the reference.

RRC-A set value = Time (distance) from the output of the scanner home position detection signal (MHPS OFF) to the image lead edge position.

If this setting is not made properly, the image lead edge position (image loss) varies depending on the copy magnification ratio.

When the set value is increased, the image position is shifted in the advancing direction on the paper.

When the set value is changed by 1, the image lead edge position is varied.

(SPF)

This set value is used to align the document image lead edge position and the scan image data lead edge position in the SPF scan mode.

After starting scanning, the scan image lead edge position is determined by using the resist sensor detection signal (REGS ON) timing as the reference.

RRC-A set value = Time (distance) from the output (resist sensor detection signal (REGS ON) to the image lead edge position.



If this setting is not made properly, the image lead edge position (image loss) on the copy paper may vary depending on the copy magnification ratio.

When the set value is increased, the image position is shifted in the advancing direction of the copy paper.

When the set value is changed by 1, the image lead edge position is changed by about 0.1mm.

#### (RRC-B)

This set value is used to adjust the relative positions of the image position on the OPC drum and the copy paper.

This adjustment is made by adjusting the time from the output timing of the image lead edge signal (LD START signal) to RRC ON.

At the timing of LD START signal output, the print image is made on the OPC drum at an optional position with the laser beam.

Actually the RRC ON timing is determined as follows:

RRC ON timing = This set value (RRC-B) - Lead edge void set value (DEN-A)

When the set value is increased, the RRC ON timing is delayed, decreasing the lead edge void area.

When the set value is changed by 1, the lead edge void area is changed by about 0.17mm (about 0.21mm for AR-4XX series; about 0.24mm for AR-5XX series).

#### (Note)

The value of RRC-A must be properly set in advance to this adjustment.

#### (IMAGE LOSS)

This set value (timing adjustment value) is used to determine the lead edge image loss and the image lead edge reference position by using the scan image lead edge position set with RRC-A.

Effective print data is determined from the image lead edge position data scanned with this set value.

The image lead edge reference position on the document is at 2mm from the right of the document position alignment plate.

The effective image (effective image data) is determined by scanning the image.

When the set value is increased, the image loss becomes greater.

When the set value is changed by 1, the image loss is changed by about 0.1mm.

#### (DEN-A)

Used to set the timing for the RRC ON timing (paper timing) set with EEC-B.

RRC ON timing = (RRC-B) - Lead edge void set value (DEN-A)

When this adjustment value is changed, the print image position for the paper position is changed. As a result, the lead edge void area is also changed.

When the set value is increased, the RRC ON timing is advanced and the lead edge void area becomes greater.

When the set value is changed by 1, the lead edge void area is changed by about 0.1mm.

#### (DEN-B)

The rear edge void area is adjusted by controlling the effective print data length with the image lead edge signal (LD START signal) output from the ICU as the reference.

The effective image (effective image data) is determined when scanning the image.

When the set value is increased, the rear edge void area becomes great.

When the set value is changed by 1, the rear void area is changed by about 0.1mm.

#### (REAR LOSS (SPF))

Used to adjust the rear edge image loss in the SPF copy mode.

The greater the set value is, the greater the rear edge image loss is.

When the set value is changed by 1, the rear edge image loss is changed by about 1mm.

Adjust in the following sequence:

- 1) Set the image loss amount (IMAGE LOSS) and the paper lead edge void amount (DEN-A) to arbitrary values (20). (0~99: 0.1mm/step)
- 2) Adjust the document scan start position (RRC-A) so that the actual copy image loss becomes the value set in procedure 1. (0~99: 0.24mm/step) (0.29mm/step (AR-4XX/5XX series))
- 3) Adjust the resist roller clutch ON timing (RRC-B) so that the actual copy image loss becomes the value set in procedure 1. (0~99: 0.17mm/step)
- 4) In the SPF copy mode, adjust the SPF image position (SPF) to the value set in procedure 1). (0~99, 0.1mm/step)
- 5) Adjust the rear edge image loss (REAR LOSS (SPF)) in the SPF copy mode. (0~20, 1mm/step) (AR-2X1/3X1/4XX/250/XX6 series only)
- 6) Adjust the rear edge void amount (DEN-B). (0~99: 0.1mm/step)

#### (AR-501/505)

#### (Other models)

## 50 - 2

Purpose	Adjustment
Function (Purpose)	Used to adjust the copy image position and the void area (image loss) on the print paper in the copy mode. (Simple adjustment) (This simulation allows the same simulation with SIM 50-1 more simply.)
Item	Picture quality      Image position
Operation/ Procedure	1. Select the adjustment item with [↑], [↓] keys. 2. Enter the adjustment value with the 10-key. 3. Press the [OK] key. (The value entered in procedure 2 is set.)
IMAGE LOSS DEN-A DEN-B	} Same as SIM 50-1

This simulation is used to automatically adjust the image loss, the void area, and the image position by directly entering the paper lead edge and the image shift (in the unit of 0.1mm) in 400% (200% for the SPF) copy.

- a. Distance (Document table mode 400%) up to the scale of 10mm from the image lead edge a L3

b. Distance from the paper lead edge to the image lead edge → L2

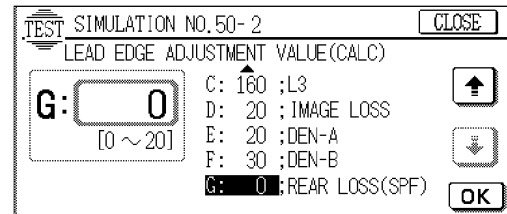
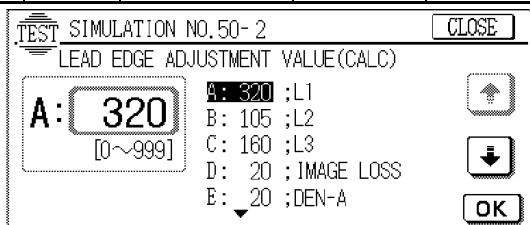
c. Distance from the image lead edge to the scale of 10mm (SPF mode 200%) → L3

\* The measurement value is multiplied with 10 to enter.

With the above procedure, the values of RRC-A and RRC-B in SIM 50-1 are automatically calculated and set. By directly setting the values (actual dimensions [mm] x 10) of IMAGE LOSS, DEN-A and DEN-B, the lead edge image loss, the lead edge void area, and the rear edge void area can be set.

By setting the image loss, DEN-A, DEN-B (actual dimension (mm) x 10) and REAR LOSS (SPF) (actual dimension (mm)) directly, the lead edge image loss, the lead edge void area, the rear edge void area and the rear edge image loss (SPF) can be set.

Code	Adjustment item	Adjustment value	Note
A	L1		When the image lead edge position varied depending on the copy magnification ratio, change the set value.
B	L2		
C	L3		When the image lead edge position varied depending on the copy magnification ratio, change the set value.
D	IMAGE LOSS	1.5 to 3.0mm	The greater the set value is, the greater the image loss is.
E	DEN-A	1.5 to 3.0mm	The greater the set value is, the greater the void area is.
F	DEN-B	1.5 to 3.0mm	The greater the set value is, the greater the void area is.
G	REAR LOSS (SPF)		The greater the set value is, the greater the image loss is. (AR-2X1/3X1/4XX/250/XX6 series only)

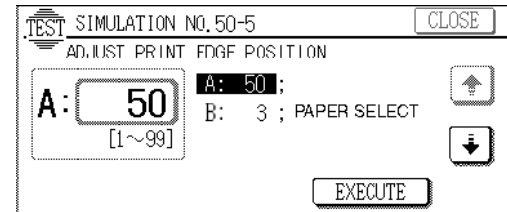


## 50 - 5

Purpose	Adjustment
Function (Purpose)	Used to adjust the print image position (top margin) on the print paper in the print mode.
Item	Picture quality      Print area
Operation/ Procedure	1. Enter the adjustment value with the 10-key. 2. Press the [EXECUTE] key to set the adjustment value entered in procedure 1.

When the set value is increased, the top margin is increased.  
When the set value is changed by 1, the top margin is changed by about 0.1mm.

Default: 50



## 50 - 6

Purpose	Adjustment
Function (Purpose)	Used to adjust the copy lead edge. (RSPF)
Item	Picture quality      Print area
Operation/ Procedure	1. Perform the 0C lead edge adjustment with SIM 60-1/2. (To use the 0C lead edge void quantity.)

- Set the image loss quantity (LOSS (RSPF)) to a desired value. (0 - 99: 0.1 mm/step)
- Adjust the original scanning start position (RSPF (SIDE1)/RSPF (SIDE2)) so that the actual copy image loss quantity is as specified in procedure 2. (0 - 99: 0.1 mm/step)
- Adjust the rear edge void quantity (DEN-B). (0 - 99: 0.1 mm/step)
- Adjust the rear edge image loss quantity (REAR LOSS (SPF)) when the SPF is used. (0 - 20 mm/step)

There are five input items of the copy lead edge adjustment; LOSS (RSPF), RSPF (SIDE1), RSPF (SIDE 2), DEN-B, and REAR LOSS (RSPF). Select the desired item with [↑], [↓] keys to change the set value.

- Image loss quantity setup value (RSPF) --- (LOSS (RSPF))  
Used to adjust the output timing of the image lead edge signal (SCAN signal) after starting scanning of the original. (0 - 99: Reference value 20)
- Original front surface scanning start position adjustment value --- (RSPF (SIDE1))  
Used to set the time from the start of original feed to reaching at the exposure position. ([Front surface] (0 - 99: Reference value 50)
- Original back surface scanning start position adjustment value --- (RSPF (SIDE2))  
Used to set the time from the start of original feed to reaching at the exposure position. [Back surface] (0 - 99: Reference value 50)

4. Rear edge void quantity adjustment value --- (DEN-B)  
Used to set the void quantity made at the rear edge of the original when the RSPF is used. (0 - 99: Reference value 30)
5. Rear edge image loss quantity setup value --- (REAR LOSS (RSPF))  
Used to set the image loss quantity at the rear edge when the RSPF is used. (0 - 20: Reference value 0)

**50 - 7**

Purpose	Adjustment
Function (Purpose)	Used to adjust the copy lead edge (simple method). (RSPF)
Item	Picture quality                      Print area
Operation/ Procedure	1. Execute SIM 50-1/2 to adjust the 0C lead edge. (To adjust the 0C lead edge void quantity.) 2. Set the image loss quantity (LOSS (RSPF)) to the desired value. (0 - 99: 0.1 mm/step)

3. Set all of L4/L5/L6 to 0.
4. Make a 200% copy with the RSPF, and enter the shift quantity to L4/L5/L6. (0 - 999: 0.1 mm/step)
5. Repeat procedure 4 until the paper rear edge void in an actual copy image becomes the value set in procedure 2.
6. Adjust the rear edge image loss quantity (REAR LOSS (SPF)) when the SPF is used. (0 - 20: 1 mm/step)

There are five input items of the copy lead edge adjustment (simple method); L4, L5, L6, LOSS (RSPF), and REAR LOSS. Select the desired item with [↑], [↓] keys in the touch panel to change the set value.

This simulation allows the lead edge adjustment by entering the lead edge shift at 200% directly.

**50 - 10**

Purpose	Adjustment
Function (Purpose)	Used to adjust the print image center position. (Adjustment can be made for each paper feed section.)
Section	ICU
Item	Picture quality                      Image position
Operation/ Procedure	1. Select the adjustment item (paper feed section) with [↑], [↓] keys.

2. Enter the adjustment value with the 10-key.
3. Press the [OK] key to set the adjustment value entered in procedure 1.  
When the set value is increased, shift is made forward. When decreased, backward.  
When the set value is changed by 1, the shift is changed by about 0.1mm.

- A, B, C, E, F, G, H : Default 50  
D : Default 58

**50 - 12**

Purpose	Adjustment
Function (Purpose)	Used to adjust the print image center position. (Adjustment can be made for each document mode.)
Section	ICU
Item	Picture quality                      Image position
Operation/ Procedure	1. Select the adjustment item (paper feed section) with [↑], [↓] keys.

2. Enter the adjustment value with the 10-key.
3. Press the [OK] key to set the adjustment value entered in procedure 1.  
When the set value is increased, shift is made forward. When decreased, backward.  
When the set value is changed by 1, the shift is changed by about 0.1mm.

Default: 50

(AR-501/505)

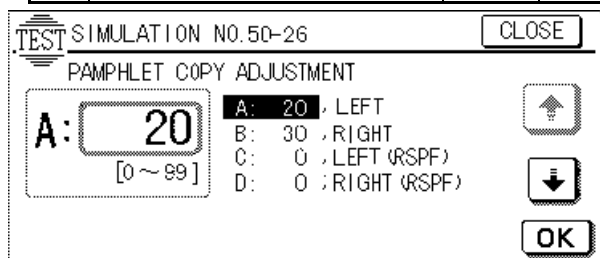
(Other models)

**50 - 26**

Function (Purpose)	Used to set the folding margin of center binding.
Operation/ Procedure	When this simulation is executed, the current set value is displayed. Under this state, the set value can be changed with the 10-key. When the OK key is pressed, the currently set value is stored in the EEPROM.

(1 step: 0.1mm)

Item	Content	Range	Default
A	Clear quantity of the folding section of center binding left image (when the OC is used)	0 ~ 99	20
B	Clear quantity of the folding section of center binding right image (when the OC is used)	0 ~ 99	30
C	Clear quantity of the folding section of center binding left image (when the RSPF is used)	0 ~ 99	0
D	Clear quantity of the folding section of center binding right image (when the RSPF is used)	0 ~ 99	0

**51****51 - 1**

Purpose	Adjustment
Function (Purpose)	Used to adjust the OPC drum separation pawl ON timing.
Section	Image process (Photoconductor/Developing/Transfer/Cleaning)
Item	Operation
Operation/Procedure	1. Enter the adjustment value with the 10-key. 2. Press the [OK] key. (The value entered in procedure 1 is set.)

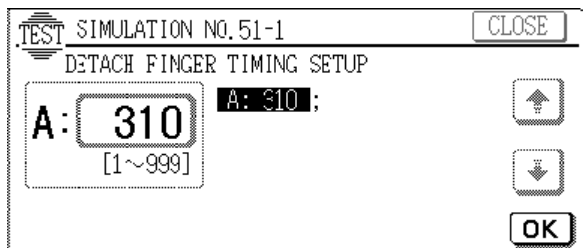
Time interval from the resist roller clutch (RRC) ON timing to the OPC drum separation pawl drive solenoid (PSPS) ON.  
When the set value is increased, the timing is delayed. When the set value is changed by 1, the timing is changed by about 1.0msec.

(AR-250/280/281/285/286/335/336/405)

Default 310

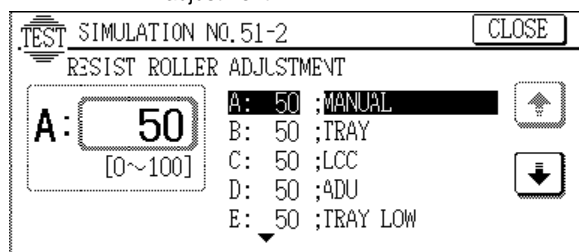
(AR-501/505)

Default: 283

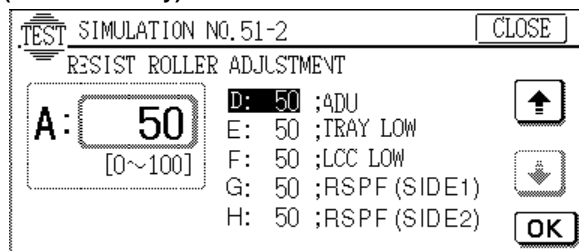
**51 - 2**

Purpose	Adjustment
Function (Purpose)	Used to adjust the contact pressure of paper onto the resist roller in each section (copier paper feed section, duplex paper feed section, SPF paper feed section). (When the print image position varies greatly for the paper or when a lot of paper jam troubles occur, the adjustment is required.)

Section	Paper transport (Discharge/Switchback/Transport)
Item	Operation
Operation/Procedure	1. Select the adjustment mode with [↑], [↓] keys. 2. Enter the adjustment value with the 10-key. 3. Press the [OK] key. (The value entered in procedure 2 is set.) Used to set the TRCA OFF timing. When the set value is increased, the timing is delayed and the paper pressure onto the resist roller is increased. When the set value is changed by 1, the timing is changed by about 1.0msec.
TRAY	Copier and desk paper feed high speed transport resist amount adjustment (45) (Default)
MANUAL	Manual paper feed resist amount adjustment (31) (Default)
LCC	LCC paper feed high speed transport resist amount adjustment (45) (Default)
ADU	ADF paper feed resist amount adjustment (30) (Default)
TRAY LOW	Copier and desk feed low transport resist amount adjustment (35) (Default)
LCC LOW	LCC paper feed low transport resist amount adjustment (45) (Default)
SPF	SPF paper feed resist amount adjustment (50) (Default)
RSPF (SIDE1)	RSPF (SIDE1) paper feed resist amount adjustment
RSPF (SIDE2)	RSPF (SIDE2) paper feed resist amount adjustment



(AR-501/505 only)

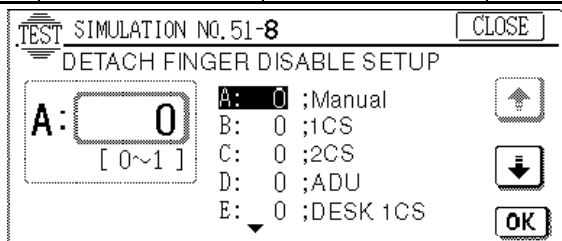
**51 - 8**

Purpose	Setting
Function (Purpose)	Used to set Enable/Disable of the drum separation pawl drive solenoid (PSPS) operation for each paper feed section (Manual paper feed, cassette 1, cassette 2, duplex module, desk cassette 1, desk cassette 2, desk cassette 3, LCC)
Section	Image process
Item	Operation
Operation/Procedure	1. When this simulation is executed, the current set value is displayed.

At that time, the item A-H can be selected with [↑], [↓] keys and the set value can be changed with the 10-key.

- When [↑] and [↓] and OK keys are pressed, the currently set value is stored in the EEPROM.

			Default
A	Manual paper feed	0: Enable/1: Disable	0: Enable
B	Cassette 1	0: Enable/1: Disable	0: Enable
C	Cassette 2	0: Enable/1: Disable	0: Enable
D	Duplex module	0: Enable/1: Disable	0: Enable
E	Desk cassette 1	0: Enable/1: Disable	0: Enable
F	Desk cassette 2	0: Enable/1: Disable	0: Enable
G	Desk cassette 3	0: Enable/1: Disable	0: Enable
H	LCC	0: Enable/1: Disable	0: Enable



## 52

### 52 - 1

Purpose	Adjustment
Function (Purpose)	Used to adjust the duplex print mode stacking capability. (Used to adjust the stop position of the paper tray width direction alignment plate in the duplex unit. The adjustment is executed by changing the width direction alignment plate home position in the software.)
Section	Duplex
Item	Operation
Operation/ Procedure	1. Select mode B with [↑], [↓] keys. 2. Select the paper feed mode with the 10-key.

3. Press the [EXECUTE] key.
4. Select mode A with [↑], [↓] keys.
5. Enter the adjustment value with the 10-key.
6. Press the [EXECUTE] key.

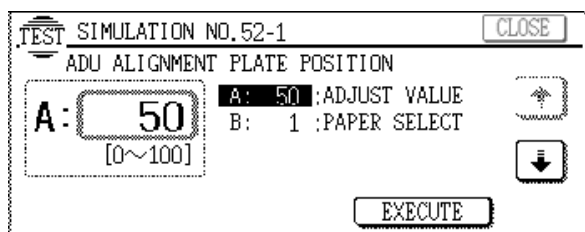
If there is no paper on the duplex tray, paper feed is performed in the paper feed mode selected in mode B and one sheet of paper is transported to the duplex tray. Then the value set in procedure 5 is set and the alignment plate is operated according to the home position corresponding to the set value.

When the set value is changed by "1", it is changed by about 0.2mm.

When the set value is increased, the alignment plate paper width is decreased.

The set value is in the range of  $\pm 50$  with 50 at the center.

- Set item      A: Alignment plate adjustment value (Default: 50)  
                   B: Paper feed mode selection  
                   1 : Manual  
                   2: Upper cassette  
                   3: Lower cassette  
                   4: Desk top cassette  
                   5: Desk middle cassette  
                   6: Desk bottom cassette  
                   7: LCC



## 53

### 53 - 1

Purpose	Adjustment
Function (Purpose)	Used to adjust the document stop position in each operation mode of ADF/RADF. (Target model: AR-250/280/285/335/405)
Section	ADF/RADF
Item	Operation
Operation/ Procedure	1. Select the adjustment mode with [↑], [↓] keys. 2. Enter the adjustment value with the 10-key.

3. Press the [OK] key.

The value entered in procedure 2 is set.

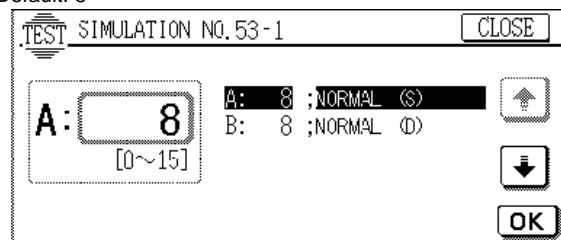
This is used to set the document transport belt stop timing.

NORMAL(S)	Normal paper front surface, stop position adjustment value
NORMAL(D)	Normal paper back surface, stop position adjustment value
THIN (S)	Thin paper front surface, stop position adjustment value
THIN (D)	Thin paper back surface, stop position adjustment value

Relations between the adjustment value and the document stop position (Varies depending on machines.)

08: $\pm 0.000\text{mm}$	00: - 8.000mm	09: + 1.000mm
	01: - 7.000mm	10: + 2.000mm
	02: - 6.000mm	11: + 3.000mm
	03: - 5.000mm	12: + 4.000mm
	04: - 4.000mm	13: + 5.000mm
	05: - 3.000mm	14: + 6.000mm
	06: - 2.000mm	15: + 7.000mm
	07: - 1.000mm	

Default: 8



### 53 - 2

Purpose	Adjustment
Function (Purpose)	Used to adjust the optical sensor sensitivity in the ADF/RADF/RSPF.
Section	ADF/RADF/RSPF
Item	Operation
Operation/ Procedure	1. The sensor names are displayed. Select the sensor to be adjusted with the key.

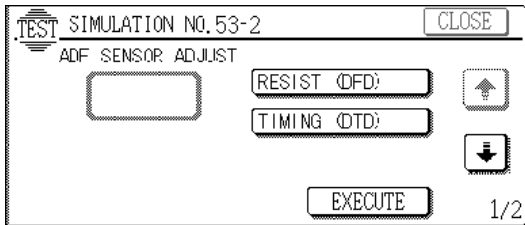
2. Press the [EXECUTE] key.

The adjustment of the sensor selected in procedure 1 is started. During execution of the adjustment, the [EXECUTE] key is highlighted. If the [EXECUTE] key is pressed under this state, the adjustment can be interrupted.

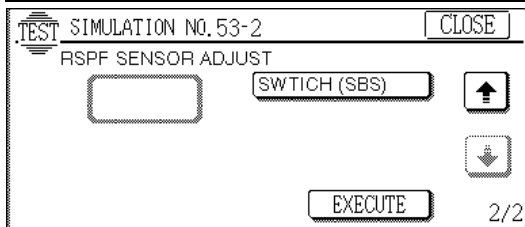
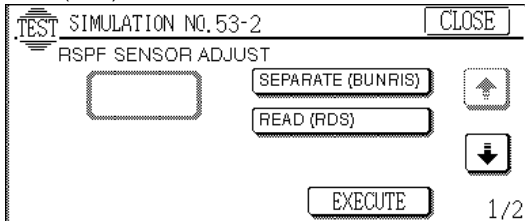
After completion of the adjustment, the COMPLETE display is shown.

(When AR-AF1/RF1 is installed)

- REGIST (DFD) Resist sensor  
 TIMING (DTD) Timing sensor  
 REVERSE (RDD) Paper exit/reverse sensor



(When RSPF is installed)  
 SEPARATE (SUNRIS) Post-separation sensor  
 READ (RDS) Read sensor  
 SWITCH (SBS) Switch-back sensor



### 53 - 6

Purpose	Adjustment
Function (Purpose)	Used to adjust the RSPF width detection level. (AR-501/505 only)
Section	Image process
Item	Operation
Operation/ Procedure	1. Press "TRY VR (MIN)" key (touch panel) in Fig. 2 to close the RSPF tray guide to the minimum. Then Press the EXECUTE key to start the adjustment. During the adjustment, the EXECUTE key is highlighted. When the EXECUTE key is pressed under this state, the adjustment is interrupted.

When two or more operations are selected, the item which is displayed at the top is performed and the other items are canceled. The canceled items are returned to the normal display.

After completion of the adjustment, the adjustment result is displayed with the adjustment item remained highlighted.

(Normal end)

The menu of Fig. 4 is displayed for 3 sec, then the menu of Fig. 5 is displayed to complete the adjustment procedure.

The adjustment result data is displayed with numerical figures.

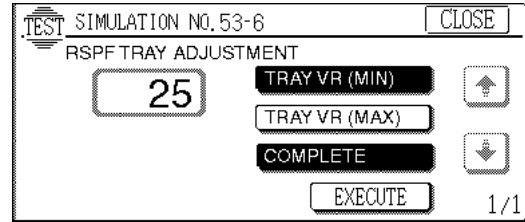
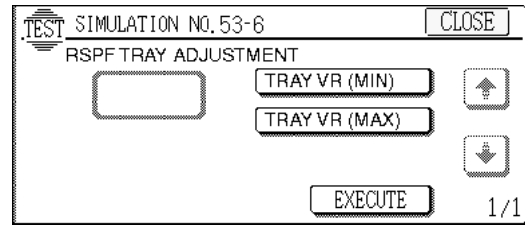
(Abnormal end)

The menu of Fig. 6 is displayed. IN this case, check the tray guide position again, and press the EXECUTE key to perform the sensor adjustment again.

2. Press "TRAY VR (MAX)" key (touch panel) to open the RSPF tray guide to the maximum.

Then press the EXECUTE key to start the adjustment. During the adjustment, the EXECUTE key is highlighted. When the EXECUTE key is pressed under this state, the adjustment is interrupted.

When two or more operations are selected, the item which is displayed at the top is performed and the other items are canceled. The canceled items are returned to the normal display. After completion of the adjustment, the adjustment result is displayed with the adjustment item remained highlighted.

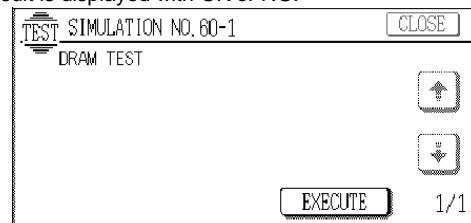


## 60

### 60 - 1

Purpose	Operation test/check
Function (Purpose)	Used to check the operation (read/write) of ICU (DRAM). (SIMM MEMORY/ONBOARD MEMORY)
Section	ICU
Item	Operation
Operation/ Procedure	1. Press the [EXECUTE] key to check the read/write operations.

2. After completion of the read/write operation check, the check result is displayed with OK or NG.



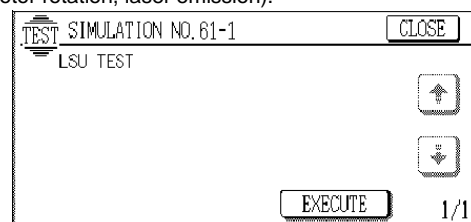
## 61

### 61 - 1

Purpose	Operation test/check
Function (Purpose)	Used to test the operation of the scanner (exposure) unit.
Section	Laser (Exposure)
Item	Operation
Operation/ Procedure	1. Press the [EXECUTE] key The scanner unit is started.

2. After completion of check operation, the result is displayed with OK or NG.

Used to check whether the sync signal (HSYNC/) is normally outputted or not by operating the laser (exposure) unit (laser motor rotation, laser emission).



**61 - 2**

Purpose	Adjustment
Function (Purpose)	Used to adjust the scanner (exposure) laser power (absolute value) in the copy mode.
Section	Laser (Exposure)
Item	Operation
Operation/Procedure	(AR-230/280/285/330/335 series) All must be set to "16."

(AR-2X1/2X6/3X1/3X6 series)  
Set all to "7" except for PH256.

(AR-4XX series)  
Set all to "5" except for PH256.

(AR-501/505)  
All must be set to "5."

**61 - 4**

Purpose	Adjustment
Function (Purpose)	Used to adjust the scanner (exposure) laser power (absolute value) in the printer mode. (For Photoconductor type B)
Section	Laser (Exposure)
Item	Operation
Operation/Procedure	(AR-230/280/285/330/335 series) Set all the values to the default value 16.

(AR-2X1/2X6/3X1/3X6)  
Set all the values to the default value 7.  
(AR-4XX/501/505 series)  
Set all the values to the default value 5.

**62****62 - 1**

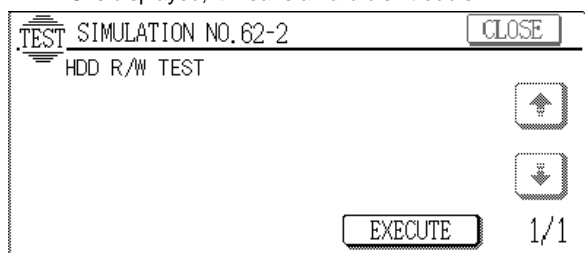
Purpose	Setting/Data clear
Function (Purpose)	Used to format the hard disk. (Target models: AR-250/280/285/335)(Models with the hard disk installed only)
Section	Memory
Item	Others
Operation/Procedure	1. Press the [EXECUTE] key. The display for reconfirmation to clear or not is shown.

2. Select YES/NO to format.  
YES: Formatting is performed.  
NO: Formatting is not performed.
3. Press YES.  
Formatting is performed. After completion, the result is shown with OK or NG.  
This procedure is necessary when the hard disk is replaced. If NG is displayed, it means a hard disk trouble.

**62 - 2**

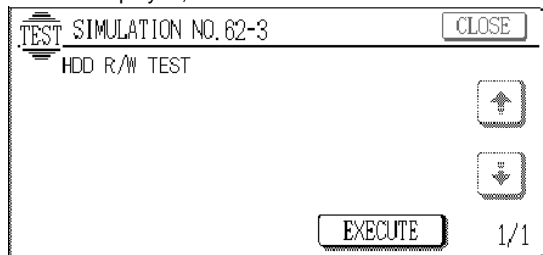
Purpose	Operation test/check
Function (Purpose)	Used to check the operation (read/write) of the hard disk. (Target models: AR-250/280/285/335)(Models with the hard disk installed only.) (Partial check)
Section	Memory
Item	Operation
Operation/Procedure	1. Press the [EXECUTE] key to start the read/write operation check.

2. After completion of the read/write operation check, the result is displayed with OK or NG.  
If NG is displayed, it means a hard disk trouble.

**62 - 3**

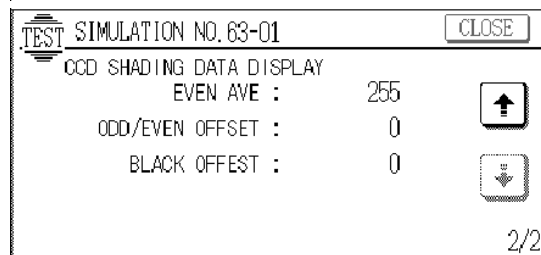
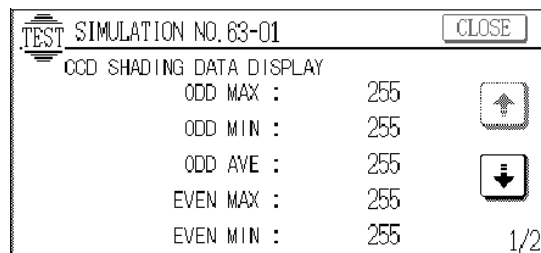
Purpose	Operation test/check
Function (Purpose)	Used to check the operation (read/write) of the hard disk. (Target models: AR-250/280/285/335) (Only the models with a hard disk) (All area check)
Section	Memory
Item	Operation
Operation/Procedure	1. Press the [EXECUTE] key to start the read/write operation check.

2. After completion of the read/write operation check, the result is displayed with OK or NG.  
If NG is displayed, it means a hard disk trouble.

**63****63 - 1**

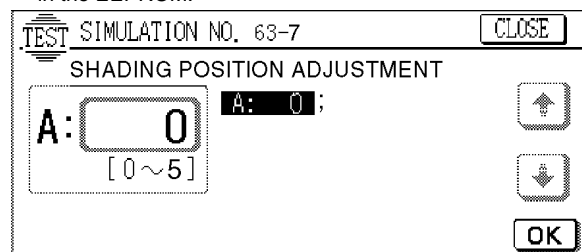
Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the result of shading correction. (The shading correction data are displayed.)
Section	Scanner (Exposure)
Item	Operation
Operation/Procedure	Used to display the result of latest shading correction. The displayed page can be shifted with [↑], [↓] keys.

ODD/EVEN OFFSET: Difference between the average detection level and the max. detection level  
BLACK OFFSET: Dark component (average level)

**63 - 7**

Purpose	Adjustment
Function (Purpose)	Used to adjust the white plate scanning start position in the shading white correction. (AR-501/505 only)
Section	Scanner
Item	Operation
Operation/Procedure	1. When this simulation is executed, the currently set value is displayed. At that time, the set value can be changed with the 10-key.

2. When the OK key is pressed, the currently set value is stored in the EEPROM.

**64****64 - 1**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of the printer function (auto print operation). (Print pattern, paper feed mode, print mode, the number of sheets, and the density can be set to an arbitrary value.)
Section	Printer
Item	Operation
Operation/Procedure	1. Select the item with [↑], [↓] keys. 2. Enter the print conditions with the 10-key. (There are 29 kinds of print patterns.)

3. Press the [EXECUTE] Key.  
Printing is executed under the condition set with procedure 2.

A: Self print pattern ----- 1.ALL 1BY1(V)  
B: Density level 2.ALL 1BY1(H)  
C: Self print number 3.ALL 1BY2(V)  
setting



- D: Picture quality mode
- 1: Auto
  - 2: Character
  - 3: Character/Photo
  - 4: Photo
- E: Paper feed source select
- 1: Manual
  - 2: Upper cassette
  - 3: Lower cassette
  - 4: Desk top cassette
  - 5: Desk middle cassette
  - 6: Desk bottom cassette
  - 7: LCC
- F: Duplex print select
- 0: Single
  - 1: Duplex
- 4.ALL 1BY2(H)
  - 5.ALL 1BY3(V)
  - 6.ALL 1BY3(H)
  - 7.ALL 1BY4(V)
  - 8.ALL 1BY4(H)
  - 9.ALL 1BY5(V)
  - 10.ALL 1BY5(H)
  - 11.ALL 2BY2(V)
  - 12.ALL 2BY2(H)
  - 13.ALL 2BY3(V)
  - 14.ALL 2BY3(H)
  - 15.BLACK \*1
  - 16.GRAY SCALE 120/4(V) \*3 \*4
  - 17.GRAY SCALE 120/4(H) \*2 \*4
  - 18.GRAY SCALE 250/8(V) \*2
  - 19.GRAY SCALE 250/8(H) \*2
  - 20.DOT PATTERN 250/2(V) \*1
  - 21.GRAY SCALE 250/2(H) \*3 \*4
  - 22.SQUARE
  - 23.SLANT 45
  - 24.SLANT 26.6
  - 25.SLANT 63.4
  - 26.ID/BG
  - 27.DOT PATTERN 12.5%
  - 28.DOT PATTERN 25%
  - 29.DOT PATTERN 50%
  - 30.SMOOTHING CHECK PATTERN

\*1: In AR-2X1/3X1/4XX/250/XX6 series, only Japan specification model allows density change.

\*2: In AR-2X1/3X1/4XX/250/XX6 series, only Japan specification model works.

\*3: AR-2X1/3X1/4XX/250/XX6 series cannot work.

\*4: AR-501/505 cannot work.

TEST SIMULATION NO.64-1

SELF PRINT

A: 29 [1~29] A: 29 ;PRINT PATTERN

B: 255 ;DENSITY

C: 1 ;MULTI COUNT

D: 1 ;EXPOSURE

EXECUTE

TEST SIMULATION NO.64-1

SELF PRINT

F: 1 [0~2] C: 1 ;MULTI COUNT

D: 1 ;EXPOSURE

E: 1 ;PAPER SELECT

F: 1 ;DUPLEX

EXECUTE

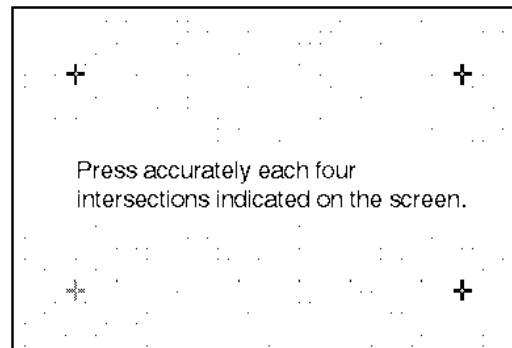
## 65

### 65 - 1

Purpose	Adjustment
Function (Purpose)	Used to adjust the touch panel (LCD display) detecting position.

Section	Operation (Display/Operation key)
Operation/ Procedure	Touch the four cross marks. The coordinates at the pressed point are set.

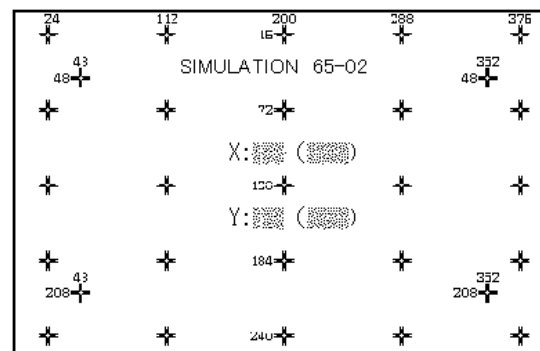
When the coordinates are properly set, the display turns to gray and returns to the simulation sub code entry screen.  
In case of an abnormality, it returns to the input display.



### 65 - 2

Purpose	Operation data output/Check (Display/Print)
Function (Purpose)	Used to check the result of the touch panel (LCD display) detecting position adjustment. (The coordinates are displayed.)
Section	Operation (Display/Operation key)
Operation/ Procedure	When the touch panel is pressed, the AD value in each of X and Y directions at that point and the coordinate values are displayed in ( ) as well as the coordinate values of each point.

It is based on the coordinates set with SIM 65-1.



## 67

### 67 - 1

Purpose	Operation test/check
Function (Purpose)	Used to check the printer PWB memory operation (read/write). (When replacing the PWB with a new one, this check must be performed.)
Section	Printer
Item	Data
Operation/ Procedure	1. When SIM 67-1 menu is displayed, the operation check of all memory (DRAM, SIMM1, SIMM2) of the printer section is started.

- For the RAM the operation check of which is started, "-----" display is changed to "CHECKING." When checking is completed, the check result is displayed with "OK" or "NG." When SIMM is inserted, the memory capacity is also displayed as "OK(16MB)."

TEST SIMULATION NO. 67-01		CLOSE
MEMORY R/W CHECK		
DRAM	:-----	↑
SIMM1	:-----	
SIMM2	:-----	↓
		1/1

TEST SIMULATION NO. 67-01		CLOSE
MEMORY R/W CHECK		
DRAM	:OK	↑
SIMM1	:OK(16MB)	
SIMM2	:CHECKING	↓
		1/1

**67 - 2**

Purpose	Operation test/check
Function (Purpose)	Used to check the printer parallel I/F operation. (This simulation is used only for production, and a special tool is required. Not available in the market.)
Section	Printer
Item	Operation Interface/Communication
Operation/Procedure	

TEST SIMULATION NO. 67-02		CLOSE
CENTRO PORT CHECK		
CENTRO PORT	:READY	
		EXECUTE

**67 - 3**

Purpose	Adjustment
Function (Purpose)	Used to adjust the printer parallel I/F ACK signal width.
Section	Printer
Item	Operation Interface/Communication
Operation/Procedure	1. Enter the ACK signal width of parallel I/F with the 10-key.

\* Set range: 0 ~ 255 (\*50ns)  
Default: 10

2. When the [OK] key is pressed, the value set in procedure 1) is set.

TEST SIMULATION NO. 67-03		CLOSE
CENTRO ACK WIDTH ADJUSTING		
A:	0	↑
	[0~255]	
		↓
		OK

**67 - 11**

Purpose	Adjustment
Function (Purpose)	Used to set YES/NO of the printer parallel I/F SELECT IN signal.
Section	Printer
Item	Operation Interface/Communication
Operation/Procedure	1. Set ON/OFF of the SELECT IN signal ON/OFF of parallel I/F with the 10-key.

\* Set range: 0 ~ 1 (0: ON, 1: OFF)  
Default: 0/LI

2. When the [ON] key is pressed, the set value set in procedure 1) is set.

TEST SIMULATION NO. 67-11		CLOSE
SELECT-IN SETTING (0: ON 1: OFF)		
A:	0	↑
	[0~1]	
		↓
		OK

**67 - 12**

Purpose	Data transfer/Copy
Function (Purpose)	Used to write data into the printer flash memory.
Section	Printer
Item	Picture quality
Operation/Procedure	1. With the power OFF, change the printer PWB jumper connection to allow writing into the flash memory.

2. Enter SIM 67-12 mode, and wait until "-----" display is changed to "READY."
3. Send data from PC.
- 1) The display of the item to be rewritten is changed in the sequence of "RECEIVE," "SUM," "ERASE," "BLANK," and "WRITE" and rewriting is performed.
- 2) The result of rewriting is displayed with "OK" or "NG."
- (Note) In case of an error, "ERROR!!! Exit sub Menu" is displayed.  
In that case, press the interrupt key to exit from SIM 67-12 mode. If the machine still waits for data from PC, stop data sending.

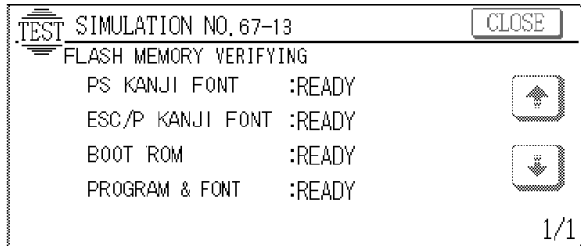
4. Change the jumper connection of the printer PWB again to disable writing to the flash memory.

TEST SIMULATION NO. 67-12		CLOSE
FLASH MEMORY WRITING		
PS KANJI FONT	:READY	↑
ESC/P KANJI FONT	:READY	
BOOT ROM	:READY	↓
PROGRAM & FONT	:READY	
		1/1

**67 - 13**

Purpose	Data transfer/Copy
Function (Purpose)	Used to check the printer flash memory data.
Section	Printer

Item	Data	Program
Operation/ Procedure	1. Enter SIM 67-13 mode and wait until "-----" display is changed to "READY."	
	2. Send data from PC.	
	1) The display of the item to be rewritten is changed in the sequence of "RECEIVE," "SUM," "VERIFY" and checking is performed.	
	2) The result of checking is displayed with "OK" or "NG."	
	(Note) In case of an error, "ERROR!!! Exit sub Menu" is displayed.	
	In that case, press the interrupt key to exit from SIM 67-13 mode. If the machine still waits for data from PC, stop data sending.	

**67 - 14**

Purpose	Data transfer/Copy	
Function (Purpose)	Used to check the printer flash memory data writing and its result.	
Section	Printer	
Item	Data	Program
Operation/ Procedure	1. With the power OFF, change the printer PWB jumper connection to allow writing into the flash memory.	

2. Enter SIM 67-14 mode, and wait until "-----" display is changed to "READY."

3. Send data from PC.

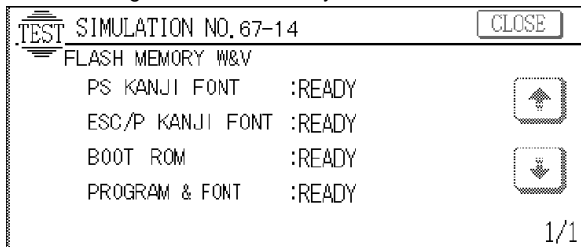
1) The display of the item to be rewritten is changed in the sequence of "RECEIVE," "SUM," "ERASE," "BLANK," and "WRITE" and rewriting is performed.

2) The result of rewriting is displayed with "OK" or "NG."

(Note) In case of an error, "ERROR!!! Exit sub Menu" is displayed.

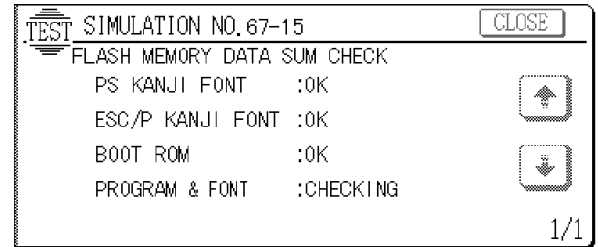
In that case, press the interrupt key to exit from SIM 67-14 mode. If the machine still waits for data from PC, stop data sending.

4. Change the jumper connection of the printer PWB again to disable writing to the flash memory.

**67 - 15**

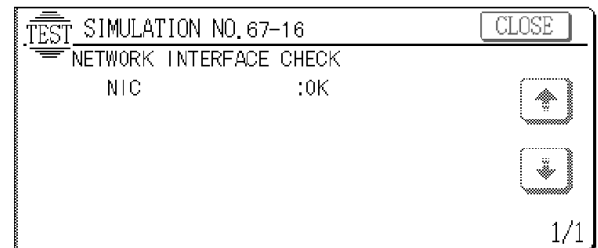
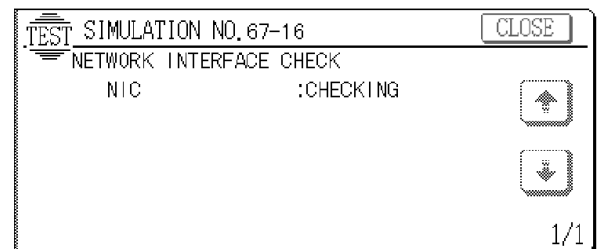
Purpose	Operation test/check	
Function (Purpose)	Used to check the sum of the printer flash memory.	
Section	Printer	
Item	Data	Program

Operation/ Procedure	1. When the simulation is executed, flash memory sum check is started.
	2. For all the items to be checked, "-----" is changed to "CHECKING." When checking is completed, the sum check result is displayed with "OK" or "NG." (In case of "NG" with PS KANJI font, the sum number is also displayed as "SUM2 NG" because there are four sums.
	Since no KANJI font is available for ARPB2 (for EX), "PS KANJI FONT" and "ESC/P KANJI FONT" are terminated with "-----."

**67 - 16**

Purpose	Operation test/check	
Function (Purpose)	Used to check the operation of the network card.	
Section	Printer	
Item	Operation	Interface/Communication
Operation/ Procedure	1. When SIM 67-16 menu is displayed, the operation check of the network card of the printer section is	

2. When checking is completed, the result is displayed with "OK" or "NG."

**67 - 17**

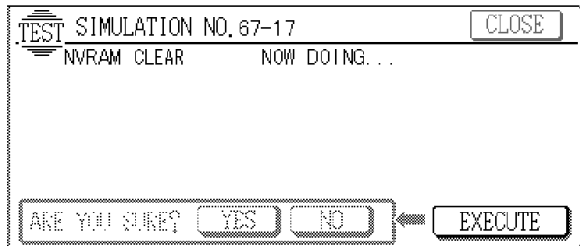
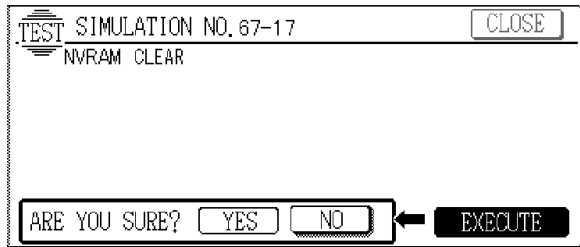
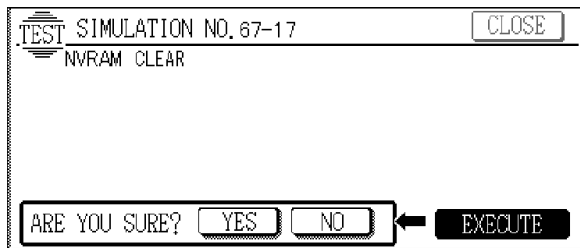
Purpose	Data clear
Function (Purpose)	Used to clear data in the NVRAM of the printer PWB (set to the default). (Printer set data)
Section	Printer
Item	Data
Operation/ Procedure	1. To clear set data of the printer section, press the [EXECUTE] key.

2. Confirmation is displayed whether to clear NVRAM or not.

YES: Clear

NO: Not clear

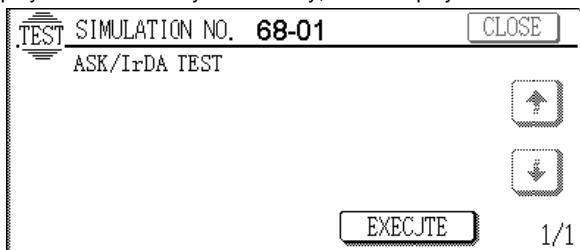
3. During execution of clearing NVRAM, "NOW DOING..." is displayed.

**68****68 - 1**

Purpose	Operation test/check
Function (Purpose)	Used to check the operation of infrared communication I/F (Zaurus link) and the related circuit. (Target models: AR-F230/S280/F280S/F280R/S330)(Japan models only)
Section	Interface
Item	Operation
Operation/Procedure	Press the [EXECUTE] key. The following checks are performed sequentially.

1. ASK/IrDA modulation LSI oscillation test
2. ASK modulation /IrDA modulation select test
3. ASK9600bps send/receive test
4. ASK19200bps send/receive test
5. IrDA9600bps send/receive test
6. IrDA115Kbps send/receive test

After completion of checking, if there is no abnormality, OK is displayed. If there is any abnormality, NG is displayed.

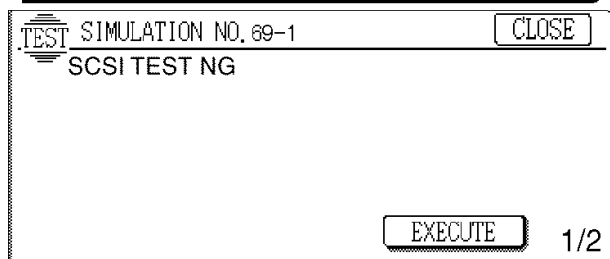
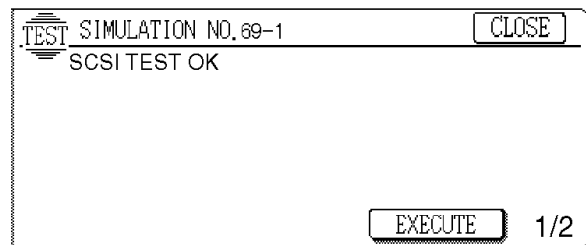
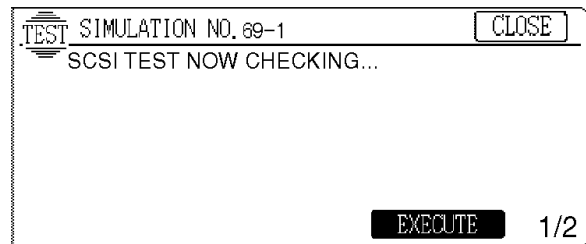
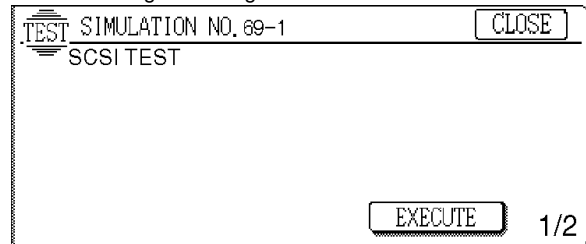


Note Japan only

**69****69 - 1**

Purpose	Check
Function (Purpose)	Used to check the input/output by connecting channels A and B of SCSI with the SCSI cable.
Section	Interface
Item	Operation
Operation/Procedure	1. When the EXECUTE key is pressed, the SCSI input/output check is performed.

2. After checking the SCSI input/output, the results are shown as shown in Fig. 3 and Fig. 4.



# [8] DISASSEMBLY, ASSEMBLY, MAINTENANCE

## 1 Maintenance table

### A. AR-250/280/281/285/286/335/336

5 Check (Check, clean, replace or adjust according to necessity.)

○ Cleaning ▲ Change △ Adjustment ☆ Lubrication □ Installing position change

Unit/Option name	Part name	Call	80K	160K	240K	320K	Remark
Drum section	OPC Drum	Drum	×	▲	×	▲	To be factory attached
	Drum	Cleaner Blade	▲	▲	▲	▲	
		Drum mark sensor	○	○	○	○	
		Drum destiny sensor	○	○	○	○	
		Drum separation pawl	▲□	▲	▲□	▲	Change the installing position at every 80 K
		Toner reception seal	▲	▲	▲	▲	
		Toner reception auxiliary blade	○	○	○	○	
	TC / AC	Charger wire	(○)×	▲	▲	▲	
		Charger case	○	○	○	○	
	Discharge Lamp	Discharge Lamp	○	○	○	○	
	Main charger	Charging plate (Saw blade)	○	▲	▲	▲	
		Screen grid	(○)×	▲	▲	▲	
Developing section	Developer Box	DV seal	×	▲	×	▲	
		DSD collar	○	○	○	○	
		DV side seal F	×	▲	×	▲	
		DV side seal R	×	▲	×	▲	
	Developer	Developer	▲	▲	▲	▲	To be charged at the time of installation
	Toner cartridge	Toner cartridge					To be charged at the time of installation / To be replaced by user about 17.5 K
		Waste toner bottle	×				To be replaced by user about every 40 K
	Waste toner bottle	Waste toner bottle	×				
Optical section	Mirror base unit	Mirror	○	○	○	○	
		Pulley	×	×	×	×	
	Copy lamp unit	Reflector	○	○	○	○	
		Mirror	○	○	○	○	
	Rail	Rail	☆	☆	☆	☆	
	Glass	Table glass	○	○	○	○	
		Dust proof glass	○	○	○	○	
		White reference glass	○	○	○	○	
	Scanner	Lens	○	○	○	○	
		Sensors	○	○	○	○	
		Drive belt	×	×	×	×	
		Drive wire	×	×	×	×	
	OC	OC	○	○	○	○	
Paper feed section	Manual feed tray	Rollers	(○)×	×	×	×	[Note 1]
		Torque limiter	×	×	×	×	[Note 1]
	Paper tray	Rollers	(○)×	×	×	×	[Note 1]
		Brake spring	×	☆	☆	☆	
		Torque limiter	×	×	○☆	×	○☆
Transport section	Transport	Transport rollers	(○)×	○	○	○	
		Resist roller	(○)×	○	○	○	
	Suction	Suction belt	(○)×	○	○	○	
Fusing section	Fusing unit 1	Upper heat roller	(○)×	(○)×	▲	(○)×	▲
		Lower heat roller	(○)×	(○)×	▲	(○)×	▲
		Upper separation pawl	(○)×	▲	▲	▲	▲
		Lower separation pawl	(○)×	▲	▲	▲	▲
		Insulation bush		×	×	×	×
	Fusing unit 2	Thermistor		×	×	×	×
		Upper heat roller gear		☆	▲	☆	▲
		Gears		☆	☆	☆	☆
Paper exit section	2 Tray paper exit unit	Paper exit follower roller	×	☆	☆	☆	☆
		Transport rollers	(○)×	○	○	○	○
Drive section		Gears	☆	☆	☆	☆	(Specified positions)
		Belts			×		
Filters				▲	▲	▲	▲
Print Quality			×	×	×	×	×

[Note 1] Rough guide of replacement intervals

The rollers should be replaced, using the values indicated by the counter of each paper feed port as a rough guide.

- 500-sheets cassette: 80 K or 2 years (this also applies to built-in 500-sheets container.)
- Manual feed tray: 40 K or 2 years
- Torque limiter of Manual feed tray: 120 K or 2 years

## B. AR-405

5 Check (Check, clean, replace or adjust according to necessity.)

○ Cleaning ▲ Change △ Adjustment ☆ Lubrication □ Installing position change

Unit/Option name	Part name	Call	90K	180K	270K	360K	Remark
Drum section	OPC Drum	Drum	×	▲	×	▲	To be factory attached
	Drum	Cleaner Blade	▲	▲	▲	▲	
		Drum mark sensor	○	○	○	○	
		Drum destiny sensor	○	○	○	○	
		Drum separation pawl	▲□	▲	▲□	▲	Change the installing position at every 90 K
		Toner reception seal	▲	▲	▲	▲	
		Toner reception auxiliary blade	○	○	○	○	
		Cleaner side seal F/R	×	×	×	×	
	TC / AC	Charger wire	(○)×	▲	▲	▲	
		Charger case	○	○	○	○	
	Discharge Lamp	Discharge Lamp	○	○	○	○	
	Main charger	Charging plate (Saw blade)	○	▲	▲	▲	
		Screen grid	(○)×	▲	▲	▲	
Developing section	Developer Box	DV seal	×	▲	×	▲	
		DSD collar	○	○	○	○	
		DV side seal F	×	▲	×	▲	
		DV side seal R	×	▲	×	▲	
	Developer	Developer		▲	▲	▲	To be charged at the time of installation
	Toner cartridge	Toner cartridge					To be charged at the time of installation / To be replaced by user about 22 K
	Waste toner bottle	Waste toner bottle	×				To be replaced by user about every 40 K
Optical section	Mirror base unit	Mirror	○	○	○	○	
		Pulley		×	×	×	
	Copy lamp unit	Refractor	○	○	○	○	
		Mirror	○	○	○	○	
	Rail	Rail		☆	☆	☆	
	Glass	Table glass	○	○	○	○	
		Dust proof glass	○	○	○	○	
		White reference glass	○	○	○	○	
	Scanner	Lens	○	○	○	○	
		Sensors	○	○	○	○	
		Drive belt		×	×	×	
		Drive wire		×	×	×	
	OC	OC	○	○	○	○	
Paper feed section	Manual feed tray	Rollers	(○)×	×	×	×	[Note 1]
		Torque limiter	×	×	×	×	[Note 1]
	Paper tray	Rollers	(○)×	×	×	×	[Note 1]
		Brake spring	×	☆	☆	☆	
		Torque limiter	×	×	○☆	○☆	
Transport section	Transport	Transport rollers	(○)×	○	○	○	
		Resist roller	(○)×	○	○	○	
	Suction	Suction belt	(○)×	○	○	○	
Fusing section	Fusing unit 1	Upper heat roller	(○)×	(○)×	▲	(○)×	▲
		Lower heat roller	(○)×	(○)×	▲	(○)×	▲
		Upper separation pawl	(○)×	▲	▲	▲	▲
		Lower separation pawl	(○)×	▲	▲	▲	▲
		Insulation bush		×	×	×	×
	Fusing unit 2	Thermistor		×	×	×	×
		Upper heat roller gear		☆	▲	☆	▲
		Gears		☆	☆	☆	☆
Paper exit section	1 Tray paper exit unit	Paper exit follower roller	×	☆	☆	☆	☆
		Transport rollers	(○)×	○	○	○	○
			(○)×	○	○	○	○
Drive section		Gears	☆	☆	☆	☆	☆
		Belts			×		(Specified positions)
Filters				▲	▲	▲	▲
TC			×	×	×	×	×
Print Quality			×	×	×	×	×

[Note 1] Rough guide of replacement intervals

The rollers should be replaced, using the values indicated by the counter of each paper feed port as a rough guide.

- 500-sheets cassette: 80 K or 2 years (this also applies to built-in 500-sheets container.)
- Manual feed tray: 40 K or 2 years
- Torque limiter of Manual feed tray: 120 K or 2 years

## C. AR-501/505

5 Check (Check, clean, replace or adjust according to necessity.)

○ Cleaning ▲ Change △ Adjustment ☆ Lubrication □ Installing position change

Unit/Option name	Part name	When calling	125K	250K	375K	500K	Remark
Drum peripheral	Drum		×	▲	×	▲	Installed when shipping (All destinations)
	Cleaner blade		▲	▲	▲	▲	
	Toner reception seal		▲	▲	▲	▲	
	Cleaner side seal F/R		×	×	×	×	
	Charger wire (TC/AC)	(○)×	▲	▲	▲	▲	
	Screen grid	(○)×	▲	▲	▲	▲	
	Drum separation pawl unit		▲□	▲	▲□	▲	Change the installing position at every 125K. (To prevent against scratches on the drum)
	Waste toner bottle	×					Replace at every 40K. (By the user)
	D. L.		○	○	○	○	
	Charger case (MC/TC/AC)	○	○	○	○	○	
	Charging plate (Saw teeth)	○	▲	▲	▲	▲	
	Drum density sensor		○	○	○	○	
	Drum mark sensor		○	○	○	○	
Developing section	Developer		×	▲	×	▲	Supply when installing.
	DV seal		×	▲	×	▲	
	DSD collar		○	○	○	○	
	DV side seal F		×	▲	×	▲	
	DV side seal R		×	▲	×	▲	
	MG bearing		×	×	×	×	
	Toner cartridge						Attach when installing. EX Japan: Supply toner every 25K with 700g. (User replacement)
Fusing section	Upper heat roller	(○)×	○	▲	○	▲	Clean and remove paper dust.
	Lower heat roller	(○)×	○	▲	○	▲	
	Upper separation pawl	(○)×	▲	▲	▲	▲	
	Lower separation pawl	(○)×	▲□	▲	▲□	▲	
	Thermistor		○	○	○	○	
	Upper heat roller gear		☆	▲	☆	▲	
	Paper guides	○	○	○	○	○	
	Gears		☆	☆	☆	☆	
	Insulation bush		×	×	×	×	
	Cleaning roller		▲	▲	▲	▲	
Optical section	Mirror/Lens/Reflector/Sensors	○	○	○	○	○	
	Table glass/Dust-proof glass/OC	○	○	○	○	○	
	RSPF glass	○	○	○	○	○	
	Rails		☆	☆	☆	☆	
	Drive belt/Drive wire/Pulley		×	×	×	×	
Filters			▲	▲	▲	▲	
Paper feed section	Paper feed rollers (manual/550 cassette)	(○)×	×	×	×	×	[Note 1]
	500 cassette brake spring	×	☆	☆	☆	☆	
	Torque limiter (500 cassette)	×	×	○☆	×	○☆	
	Torque limiter (manual)	×	×	×	×	×	[Note 1]
TC	TC paper guide unit	×	×	×	×	×	
Suction	Suction belt	(○)×	○	○	○	○	Newly provided.
	Separation lamp	×	×	×	×	×	
Transport section	PS follower roller	(○)×	○	○	○	○	
Paper exit reverse section	Transport rollers	(○)×	○	○	○	○	
	Paper exit follower roller (inside)	×	☆	☆	☆	☆	
	Curl correction roller	×	×	▲	×	▲	
	Transport paper guides	(○)×	○	○	○	○	
Drive section	Gears	☆	☆	☆	☆	☆	(Specified position)
	Belts			×		×	
Copy quality		×	×	×	×	×	
Others	Sensors		×	×	×	×	
RSPF	Paper feed section	Pickup roller	(○)×	×	×	×	[Note 2]
		Separation pad	(○)×	×	×	×	[Note 2]
		Paper feed roller	(○)×	×	×	×	[Note 2]
		Resist roller	(○)×	○	○	○	
	Transport section	Transport roller	(○)×	○	○	○	
		Exposure section	○	○	○	○	
	Paper exit section	Paper exit roller	(○)×	○	○	○	Wipe with alcohol for cleaning.
	Others	Sensors		○	○	○	Blow air for cleaning. [Note 3]

[Note 1] Replacement reference: Replace according to the counter value of each paper feed port.

- 500-sheet cassette paper feed roller and related parts: 80K or 2 years
- Manual paper feed roller and related parts: 40K or 2 years
- Manual feed torque limiter: 120K or 2 years

[Note 2] Replacement reference: Replace according to the counter value of the document feed unit. : 80K or 2 years

[Note 3] Clean according to the above descriptions or the counter value of the document feed unit: 50K

## 2. List of disassembly and assembly

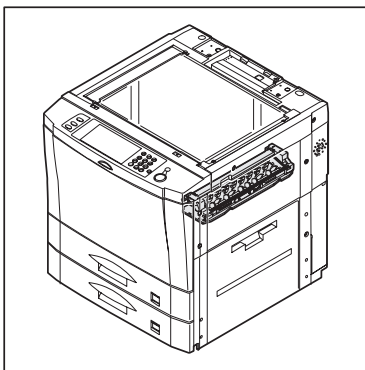
Unit	Parts
A. Developing unit	(1) Toner hopper
	(2) Developing side seal (F/R)
B. Drum unit	(1) OPC drum
	(2) Drum separation pawl
	(3) Cleaner blade
	(4) Toner reception seal
	(5) Main charger
	(6) Transfer/separation charger
C. Discharge lamp	(1) Discharge lamp
D. Scanner unit	(1) Table glass
	(2) White reference glass (SPF/RSPF scanning glass)
	(3) CCD unit
	(4) Copy lamp
	(5) Mirror base unit
	(6) Copy lamp unit
	(7) Rails
	(8) Glass section
	(9) Scanner section
E. ICU peripheral	(1) HD unit
	(2) ICU PWB
	(3) SCSI PWB (AR-501/505)
F. Laser unit	(1) Laser scan unit

Unit	Parts
G. Manual paper feed unit	(1) Manual paper feed sensor
	(2) Rollers/torque limiters
H. 500 tray paper unit	(1) Tray unit
	(2) Tray paper feed unit
I. Paper transport unit	(1) Paper transport section
J. Suction unit	(1) Suction unit
K. Fusing unit	(1) Thermistor
	(2) Upper fusing separation pawl
	(3) Lower fusing separation pawl
	(4) Lower heat roller
	(5) Upper heat roller
	(6) Upper heat roller gear
L. Two-tray paper exit unit	(1) Paper exit/transport roller
M. One-tray paper unit	(1) Paper exit roller
	(2) Paper exit/transport roller
N. PCU/AC power/High voltage power/Main motor	(1) PCU/AC power/High voltage power/Main motor
O. Major drive unit	(1) Major drive unit
P. Lift-up unit	(1) Lift-up unit
O. RSPF	(1) Paper feed section
	(2) Transport section
	(3) Paper exit section
	(4) Others

## 3. Counter clear

Maintenance cycle setting	SIM21-01	
Maintenance counter clear	SIM24-04	At drum replacement
Developing counter clear	SIM24-05	At developer replacement
OPC drum membrane decrease correction counter clear	SIM24-07	At drum replacement
Jam/trouble counter clear	SIM24-01	
Paper feed counter clear	SIM24-02	At maintenance
DF/Scan/Stapler counter clear	SIM24-03	At maintenance
Printer, other counter clear	SIM24-09	

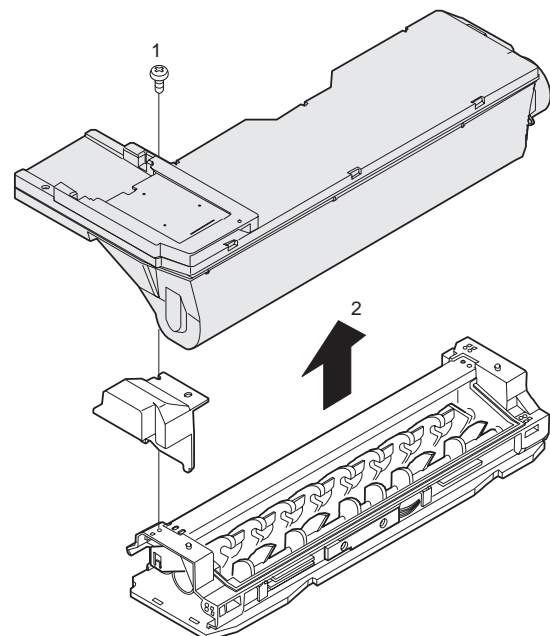
### A. Developing unit



\* After replacing developer, execute SIM 24-5 to clear the developer (copy quantity) counter.

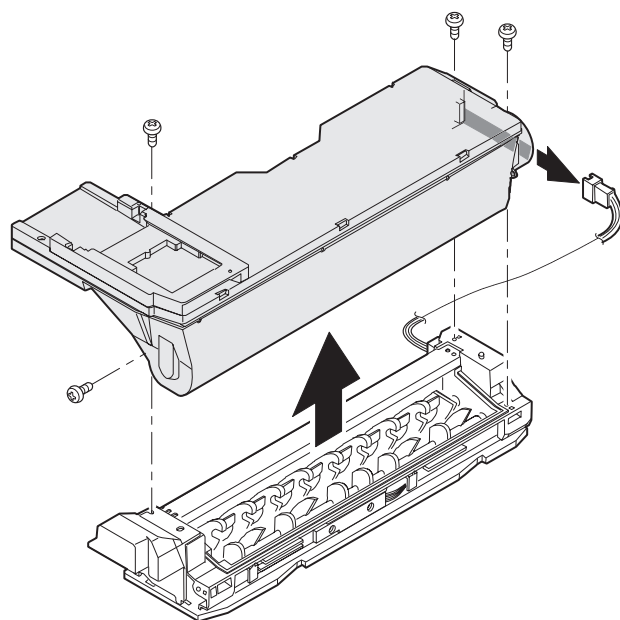
#### (1) Toner hopper

AR-250/280/281/285/286/335/336/405

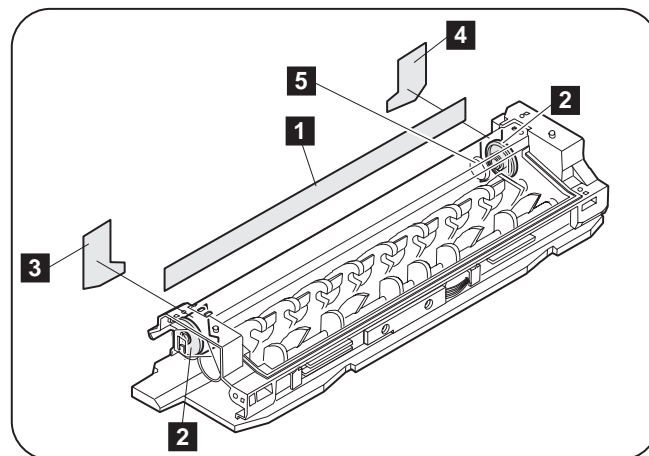
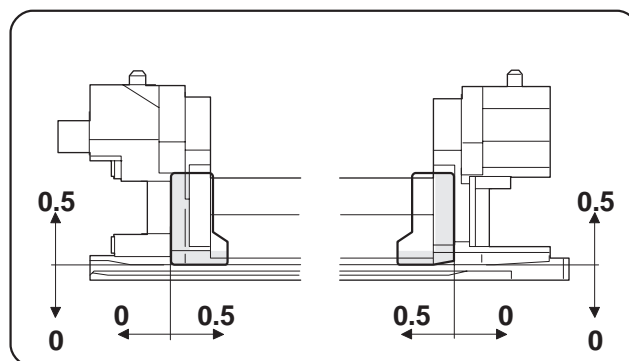




## AR-501/505



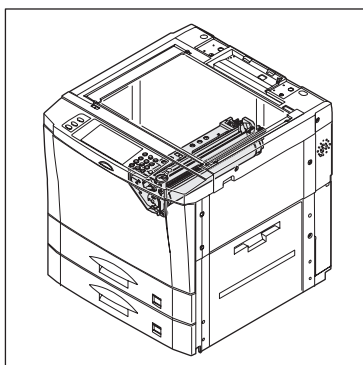
## (2) Developing side seal



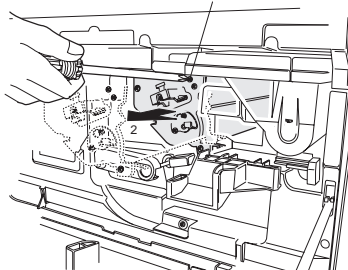
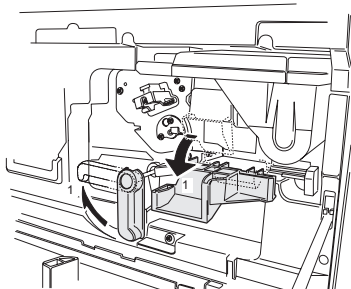
\* Attache the developing side seals to the dimensions specified above.

No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	DV seal	Check	80 K	90 K	125K	For attachment position, refer to DISASSEMBLY AND ASSEMBLY.
		Replace	160 K	180 K	250K	For attachment position, refer to DISASSEMBLY AND ASSEMBLY.
2	DSD collar	Clean	80 K	90 K	125K	
3	DV side seal F	Check	80 K	90 K	125K	
		Replace	160 K	180 K	250K	For attachment position, refer to DISASSEMBLY AND ASSEMBLY.
4	DV side seal R	Check	80 K	90 K	125K	
		Replace	160 K	180 K	250K	For attachment position, refer to DISASSEMBLY AND ASSEMBLY.
5	MG bearing	Check	—	—	125K	

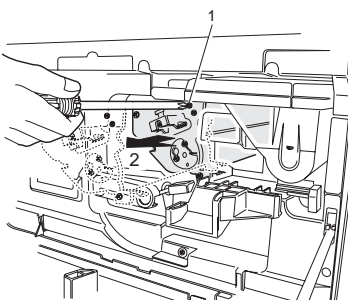
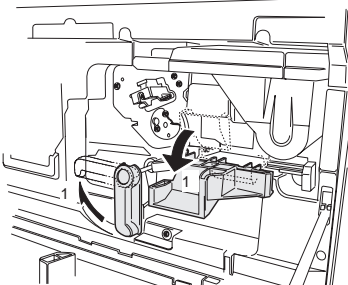
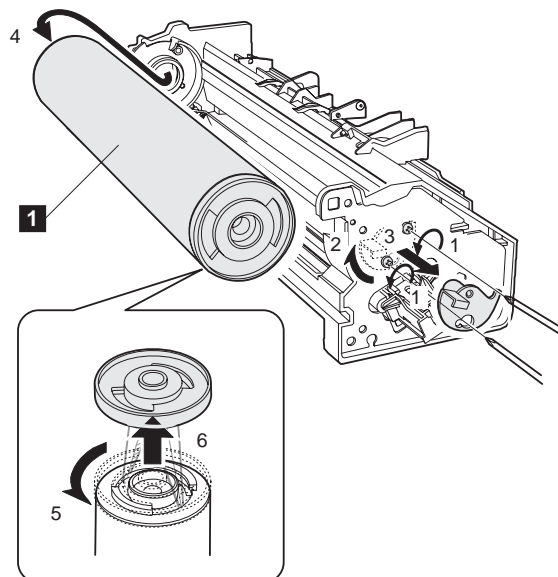
## B. Drum unit



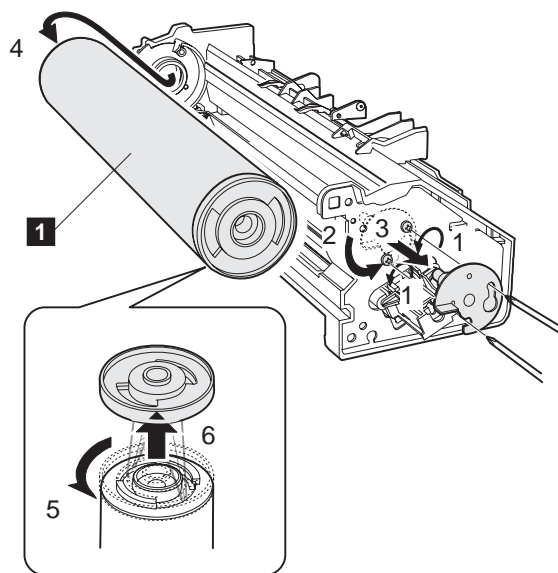
AR-280/285/335



AR-250/281/286/336/405/501/505

(1) OPC drum  
AR-280/285/335

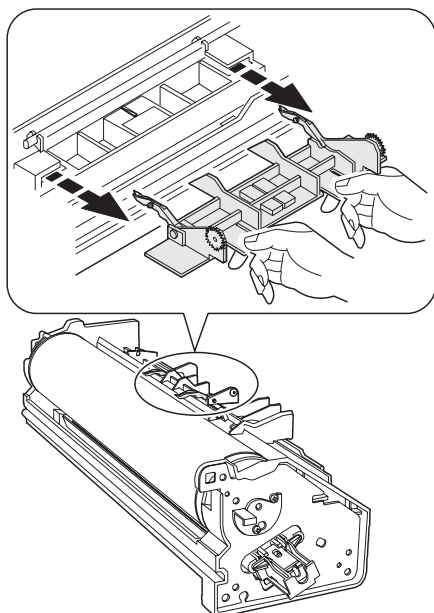
AR-250/281/286/336/405/501/505



No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Drum	Check	80 K	90 K	125K	Installed when shipping (All destinations)
		Replace	160 K	180 K	250K	Execute SIM 24-7 after replacement.

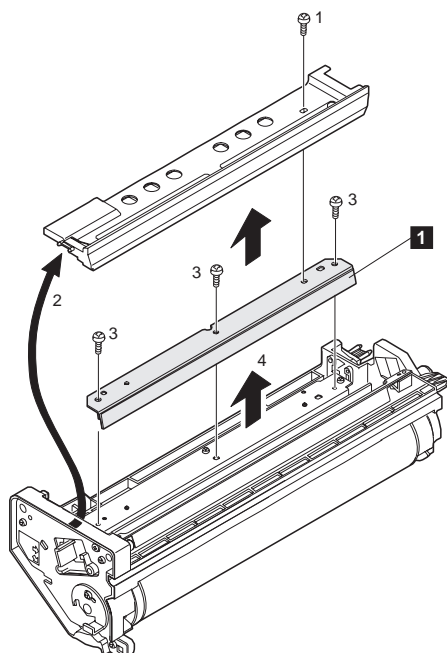
\* After replacing the OPC drum, execute SIM 24-7 to clear the counter.

\* When installing the OPC drum, apply starting powder(UKOG-0088CSZZ).

**(2) Drum separation pawl**

(The illustrations are the same as those of the AR-335.)

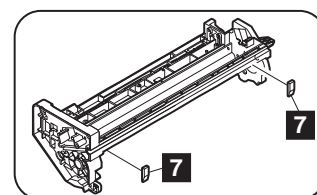
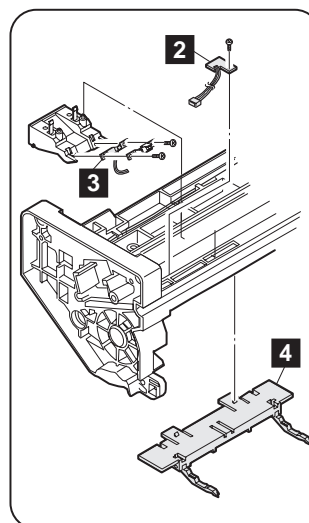
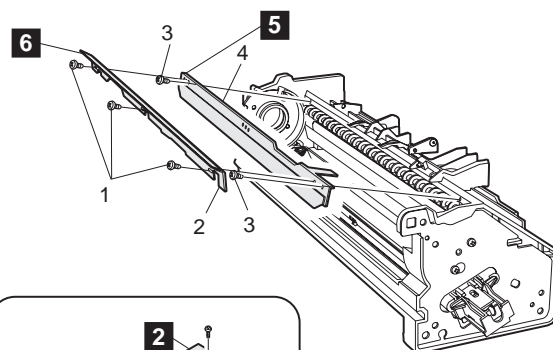
\* Be careful to clean the pawl lead edge (the contact section with the drum) and keep it from foreign materials.

**(3) Cleaner blade**

(The illustrations are the same as those of the AR-335.)

\* Do not touch the blade and the rubber section.

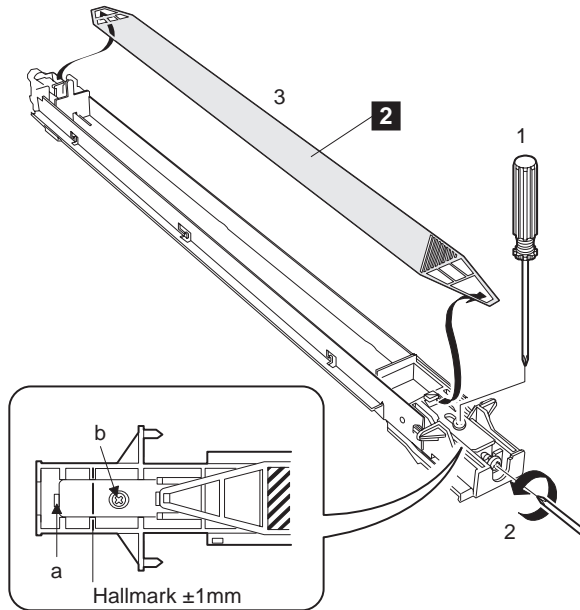
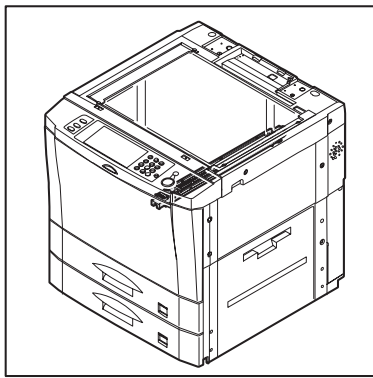
\* When installing, apply starting powder (UKOG-0088CSZZ).

**(4) Toner reception seal**

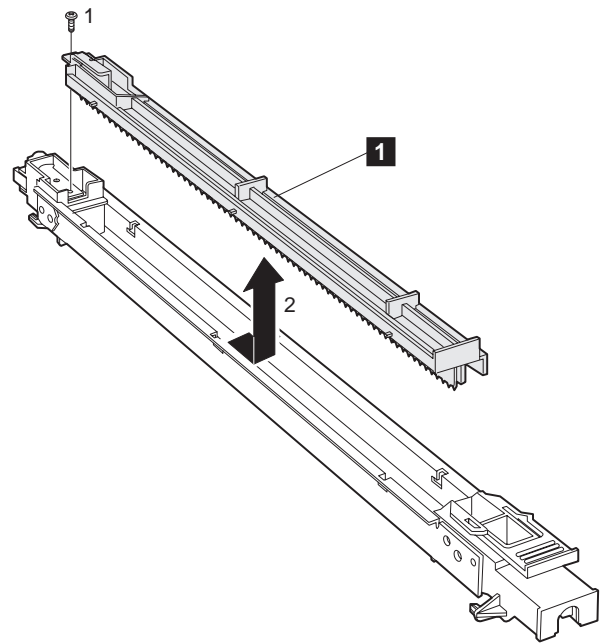
\* Do not touch the seat section.

No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/ 505	
1	Cleaner blade	Replace	80 K	90 K	125K	
2	Drum mark sensor	Clean	80 K	90 K	125K	After cleaning, perform SIM 44-2.
3	Drum density sensor	Clean	80 K	90 K	125K	After cleaning, perform SIM 44-2.
4	Drum separation pawl unit	Replace	80 K	90 K	125K	Change the installing position at every 80 K
5	Toner reception seal	Replace	80 K	90 K	125K	
6	Toner reception auxiliary blade	Clean	80 K	90 K	125K	
7	Cleaner side seal F/R	Check	—	90K	125K	

## (5) Main charger

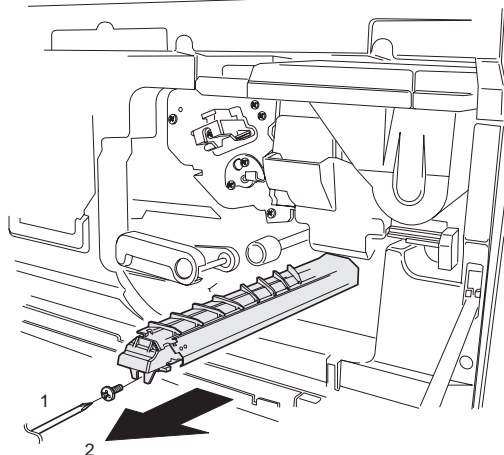
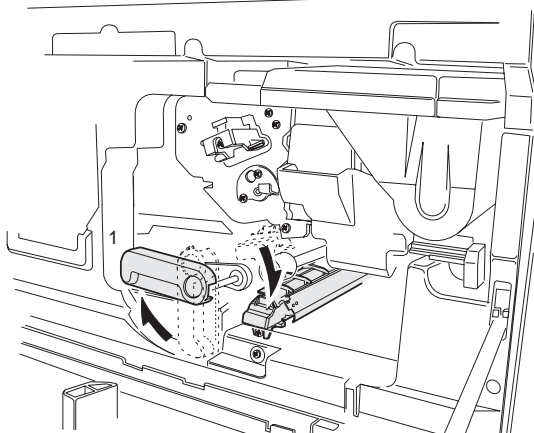
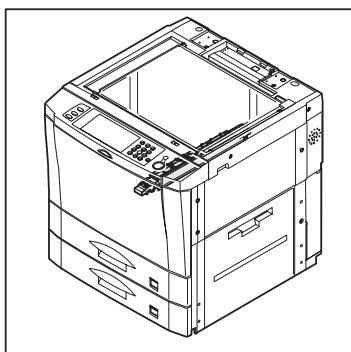


\* Adjust the screen grid tension so that the marking on the screen holder and the marking on the MC holder come on a same line. Tighten screw a, then tighten screw b.

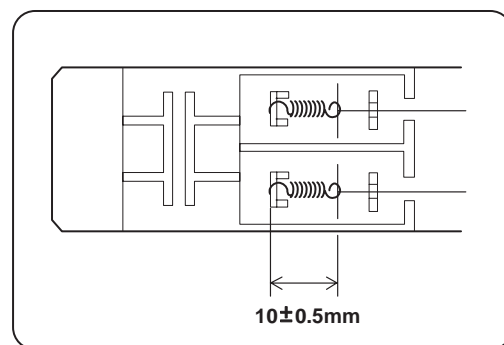
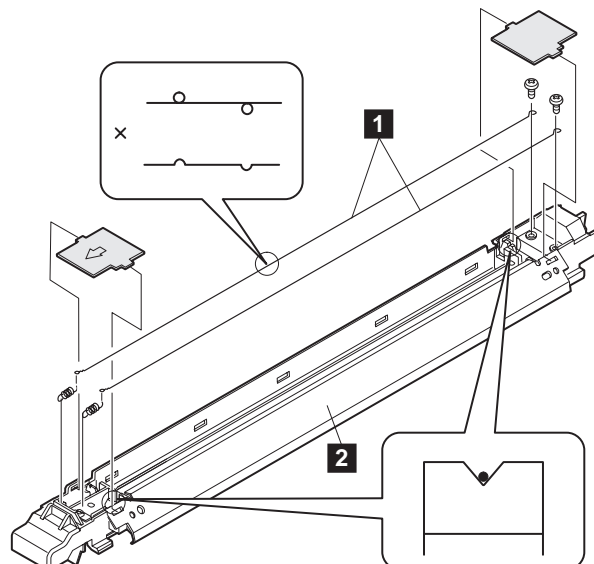
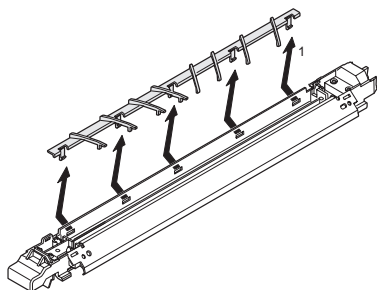


No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Charging plate (Saw tooth)	Replace	80 K	90 K	125K	
2	Screen grid	Replace	80 K	90 K	125K	

## (6) Transfer/separation charger

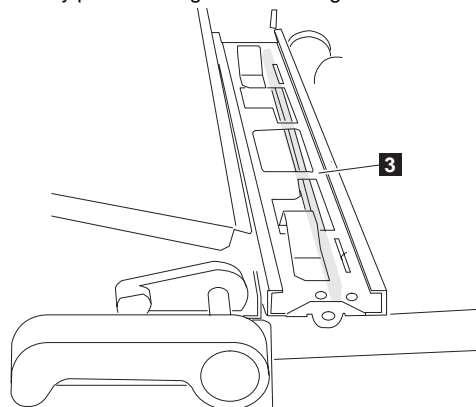


(The illustrations are the same as those of the AR-335.)



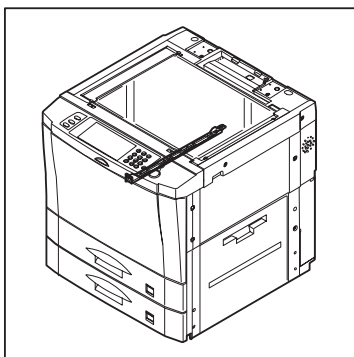
\* When replacing the charger wire:

- Be careful not to twist or bend the wire.
- Stretch the wire so that the tension spring length is as shown above.
- Securely put the charger wire in the groove.

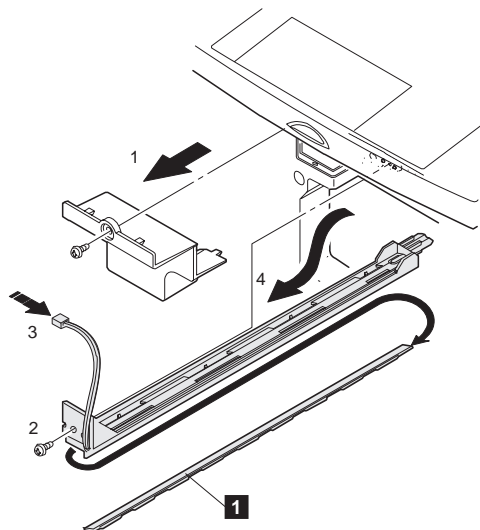


No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/ 505	
1	Charger wire (TC/AC)	Replace	80 K	90 K	125K	
2	Charger case (MC/TC/AC)	Clean	80 K	90 K	125K	
3	Separation lamp	Clean	—	—	125K	

## C. Discharge lamp



### (1) Discharge lamp

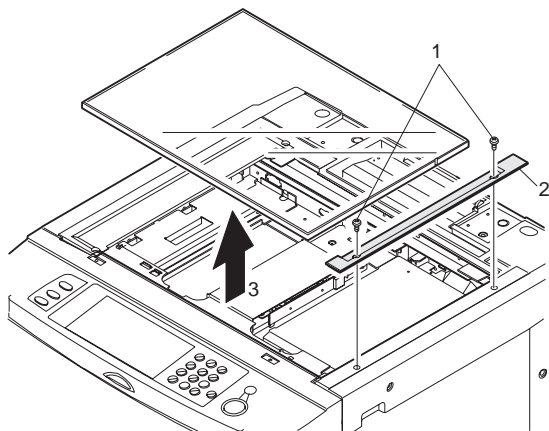


No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/ 505	
1	Discharge lamp	Clean	80 K	90 K	125K	

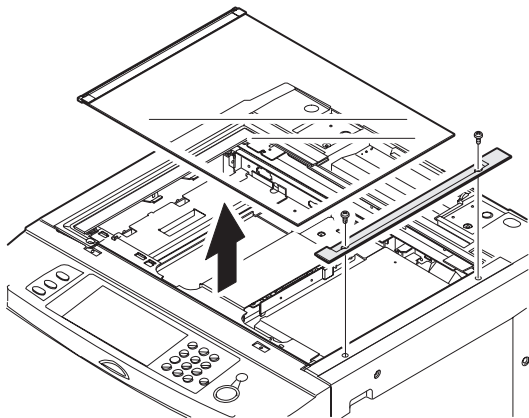
## D. Scanner unit (Optical system)

### (1) Table glass

AR-250/280/281/285/286/335/336/405



AR-501/505

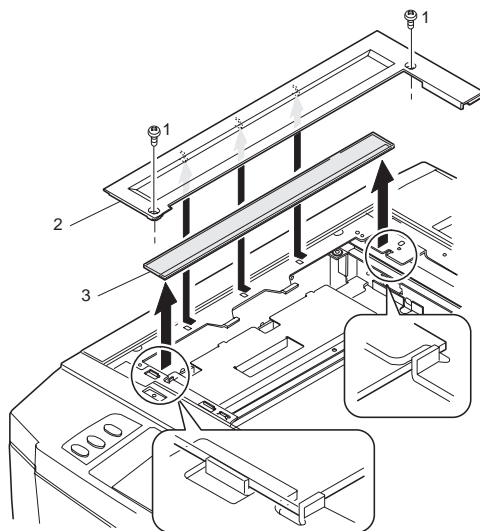


\* Table glass installing direction

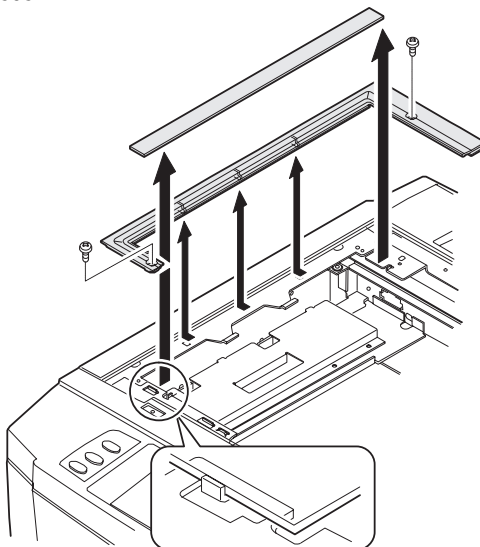
- Install the table glass so that the white marking on the glass is in the paper feed direction rear side.

### (2) White reference glass (SPF/RSPF scan glass)

AR-250/280/281/285/286/335/336/405

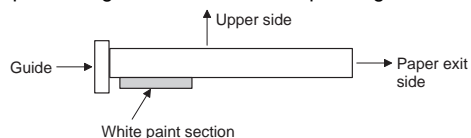


AR-501/505



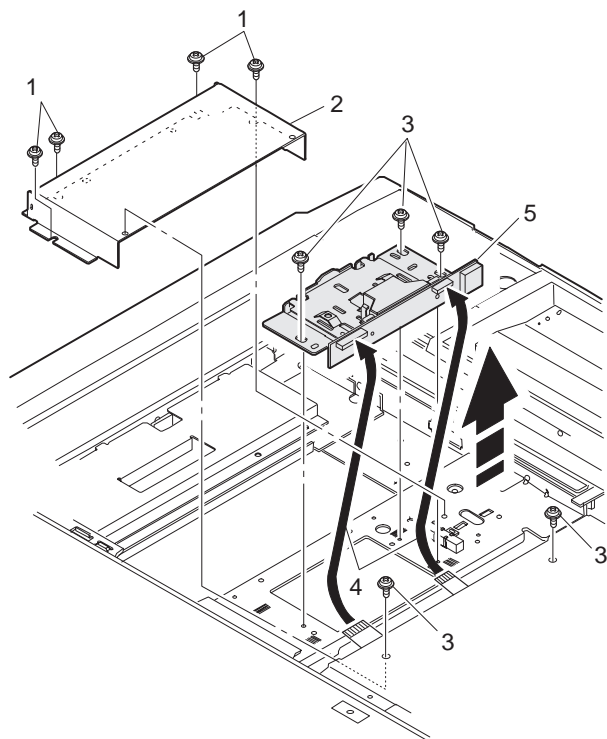


- \* The shape of the glass holder differs depending on the model.



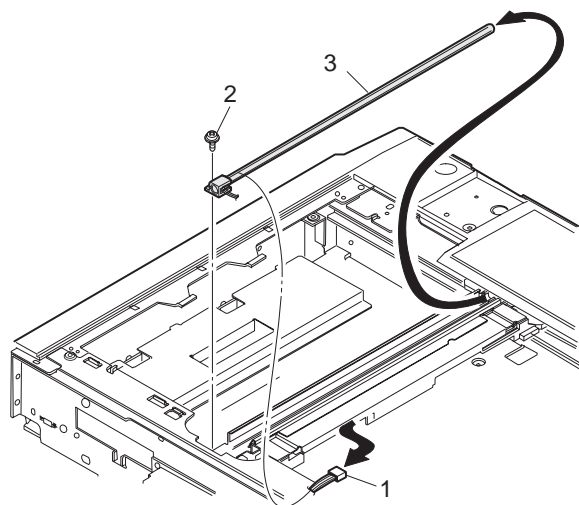
- \* Attach the glass along the guide so that the white paint section of the white reference glass faces downward as shown above.
- \* When handling the white reference glass, be careful not to scratch the white paint section and keep it from dirt or dust.

### (3) CCD unit



- \* Never loosen the screws other than those which are shown in the above figure.  
If loosened, the adjustment cannot be made in the market.
- \* When removing the CCD unit, mark the installing position.
- \* When installing again, perform the main scanning direction magnification ratio adjustment (CCD unit installing position adjustment) described above.

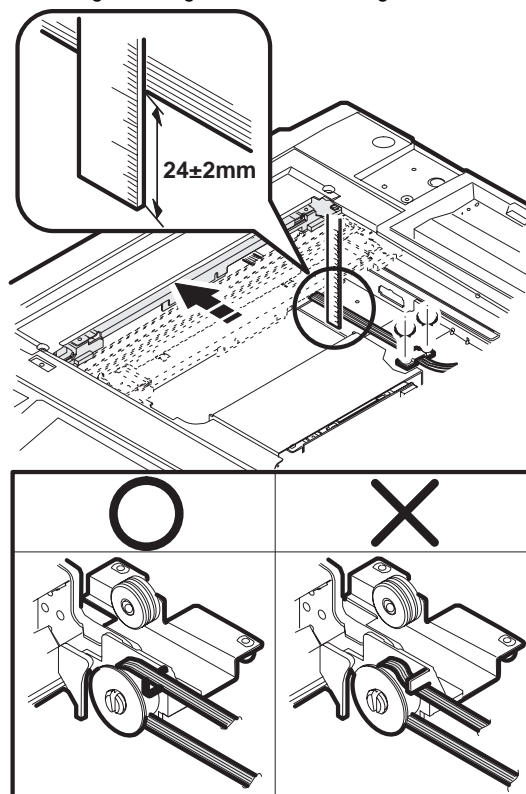
### (4) Copy lamp

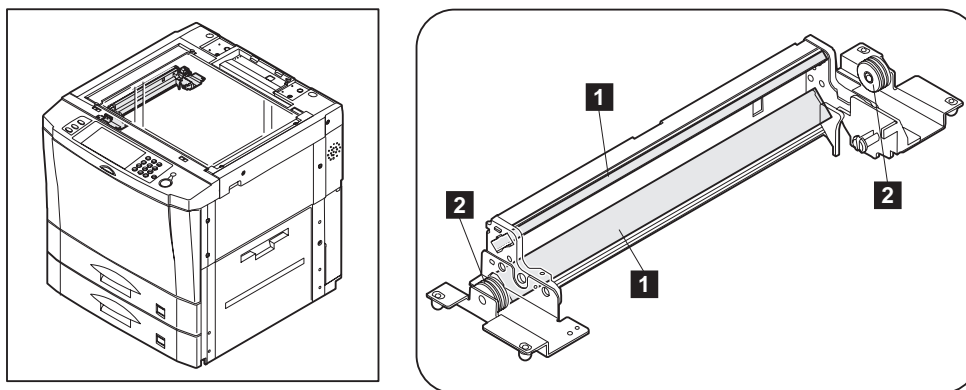


- \* Note for assembling the copy lamp unit

Shift the copy lamp unit to the paper exit side, and fix it with the harness guide so that the distance from the lower frame is about  $24 \pm 2$  mm, (25 ~ 30mm) with the copy lamp harness extended.

If the copy lamp harness is loosely fixed, the copy lamp unit may jump up when reading, resulting in abnormal reading.

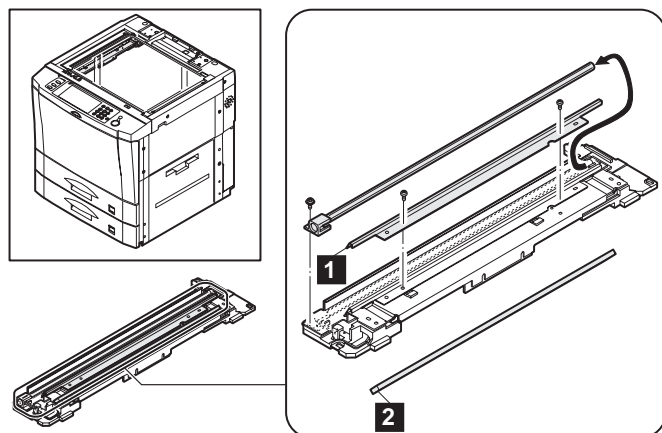


**(5) Mirror base unit**

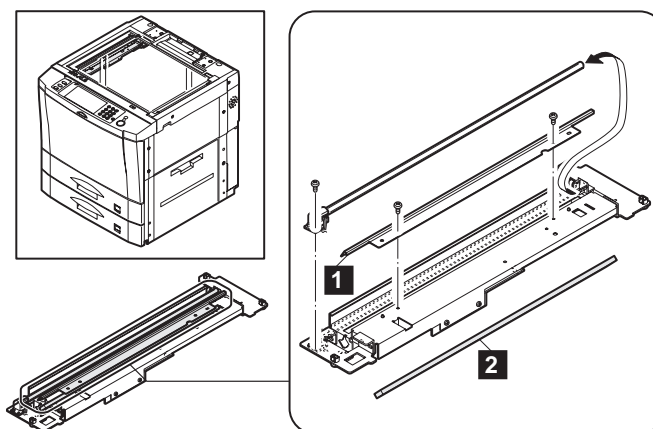
No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Mirror	Clean	80 K	90 K	125K	
2	Pulley	Check	80 K	90 K	125K	

**(6) Copy lamp unit**

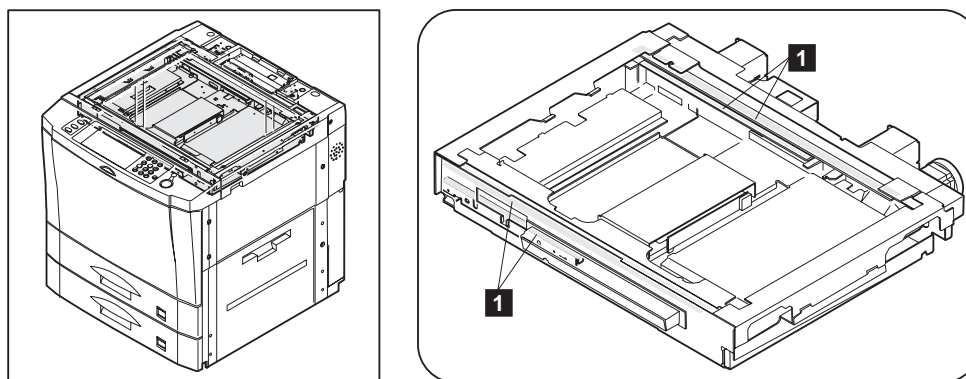
AR-280/285/335



AR-250/281/286/336/405/501/505

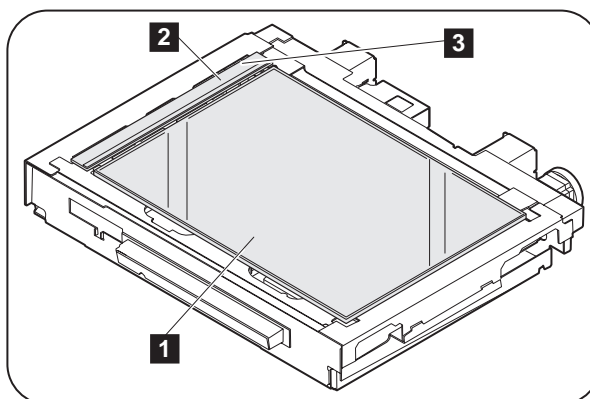
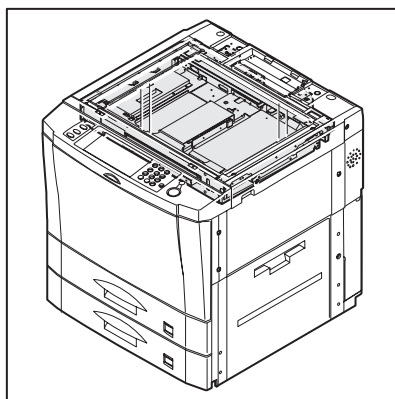


No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Reflector	Clean	80 K	90 K	125K	
2	Mirror	Clean	80 K	90 K	125K	

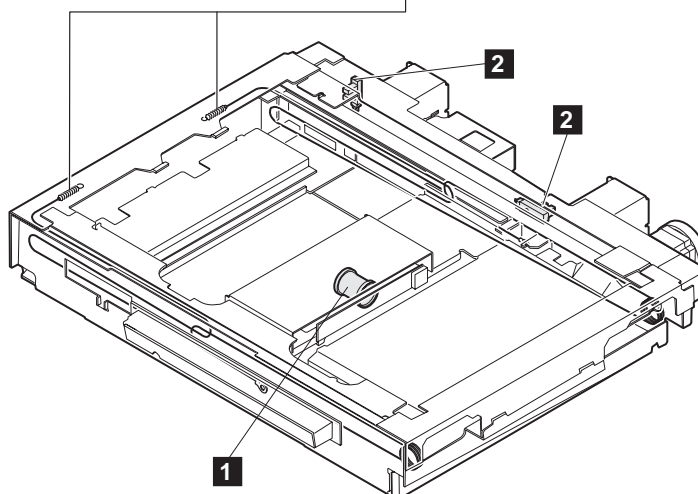
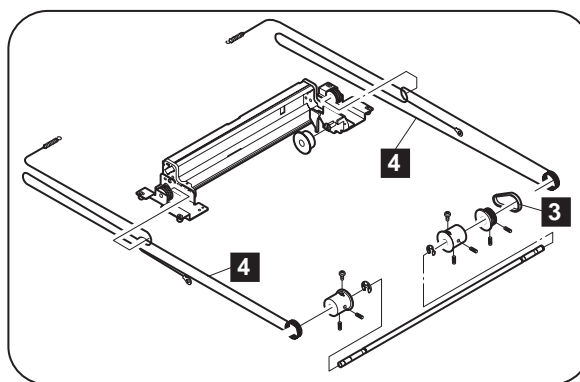
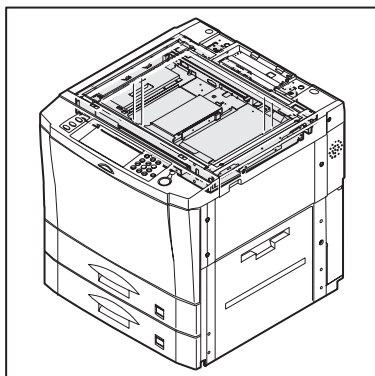
**(7) Rails**

No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Rails	Lubricate	80 K	90 K	125K	



**(8) Glass section**

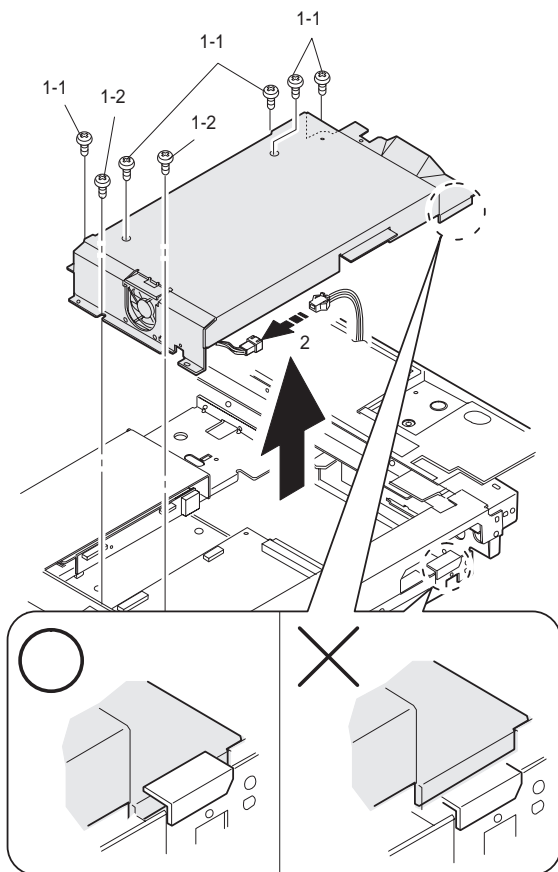
No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Table glass	Clean	80 K	90 K	125K	
2	White reference glass (OC)	Clean	80 K	90 K	125K	
3	RSPF glass	Clean	—	—	125K	

**(9) Scanner section**

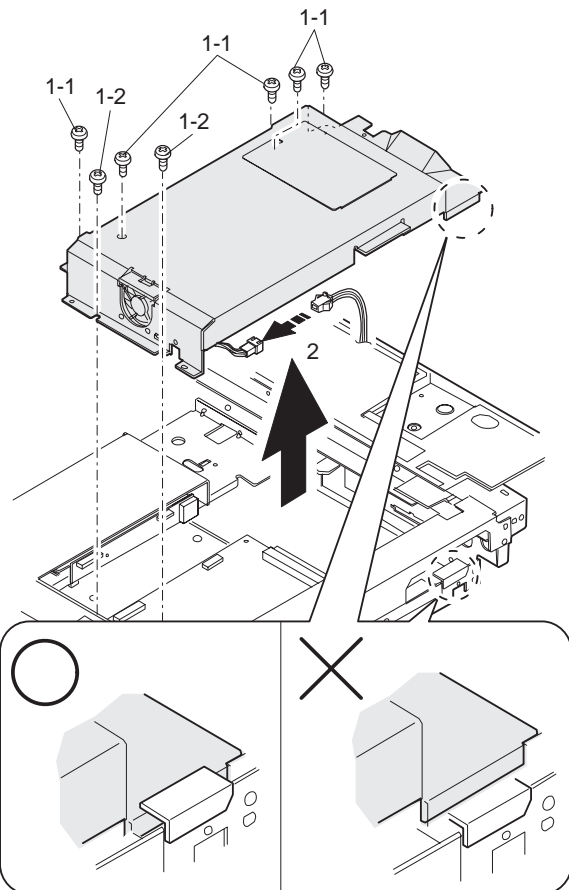
No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Lens	Clean	80 K	90 K	125K	Do not use screws.
2	Sensors	Clean	80 K	90 K	125K	
3	Drive belt	Check	80 K	90 K	125K	
4	Drive wire	Check	80 K	90 K	125K	

## E. ICU peripheral

AR-250/280/281/285/286/335/336/405

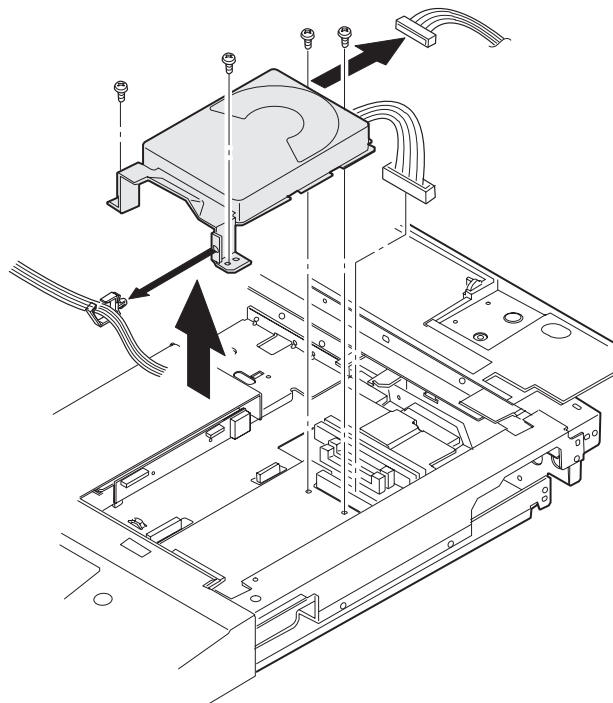


AR-501/505

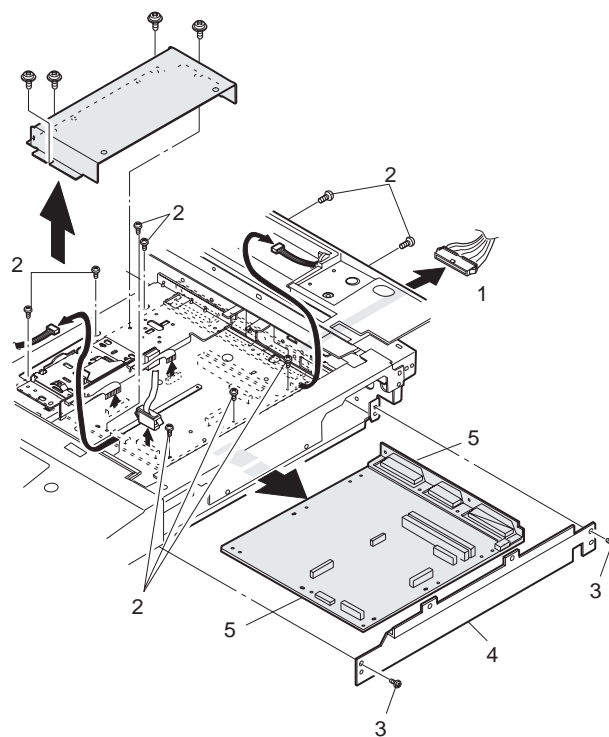


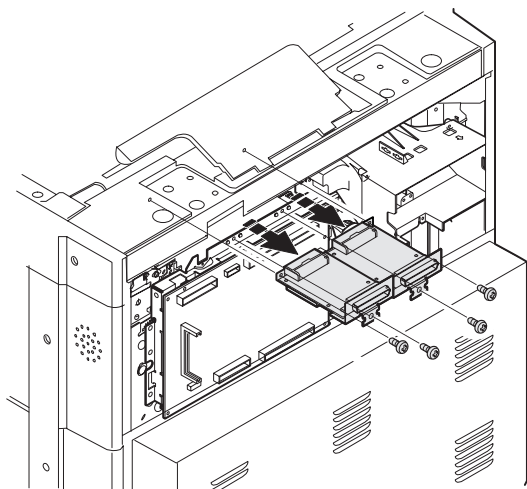
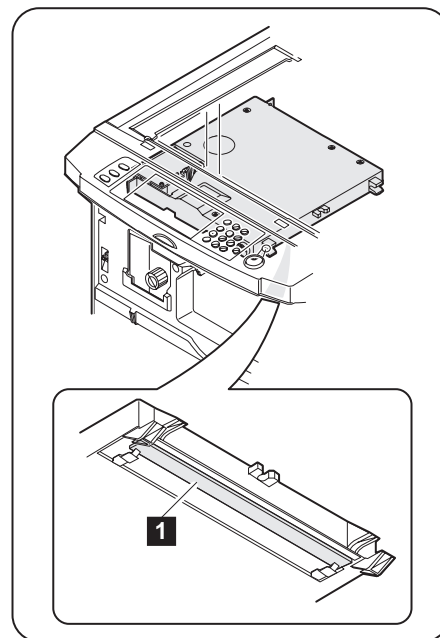
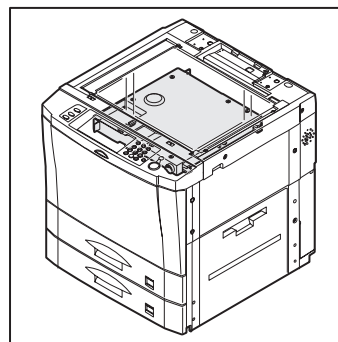
\* Screw of 1)-1 and that of 1)-2 are different from each other.

## (1) HD unit



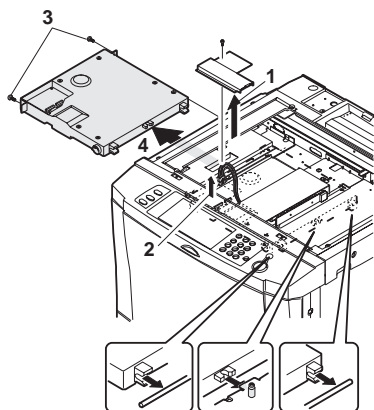
## (2) ICU PWB



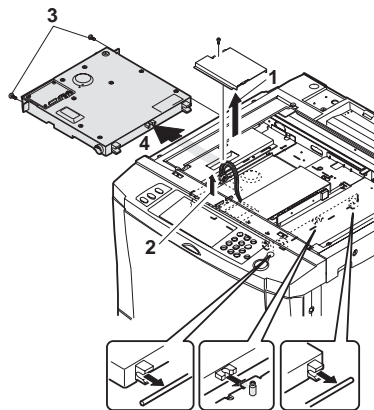
**(3) SCSI PWB (AR-501/505)****(1) Laser scanner unit****F. Laser unit**

\* Never let the laser beam directly come into your eyes, or you may go blind.

AR-250/280/281/285/335/336



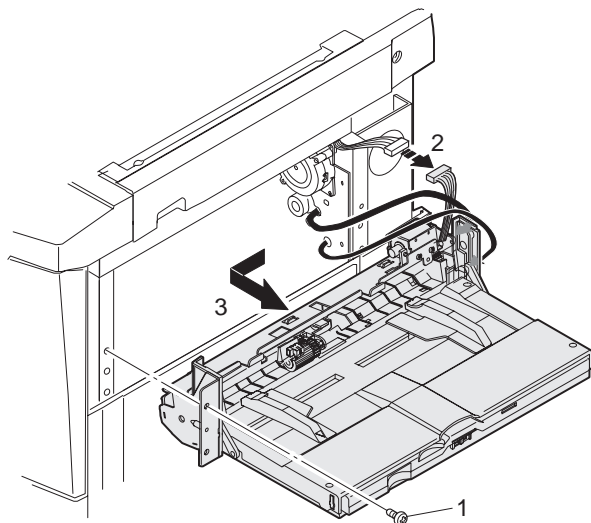
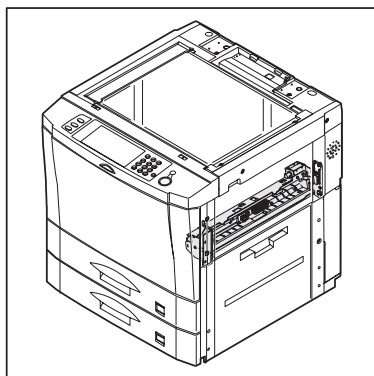
AR-405/501/505



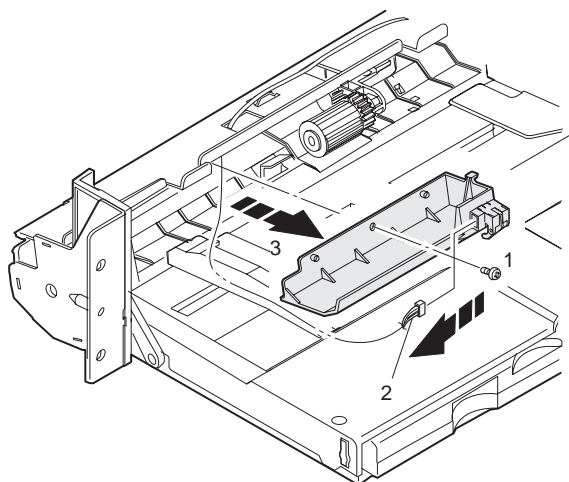
- \* When installing the laser unit, check that the three points a, b, and c are securely in positions. If not, printing errors may occur.
- \* Do not open the LSU cover (top plate).

No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Dust-proof glass	Clean	80 K	90 K	125K	

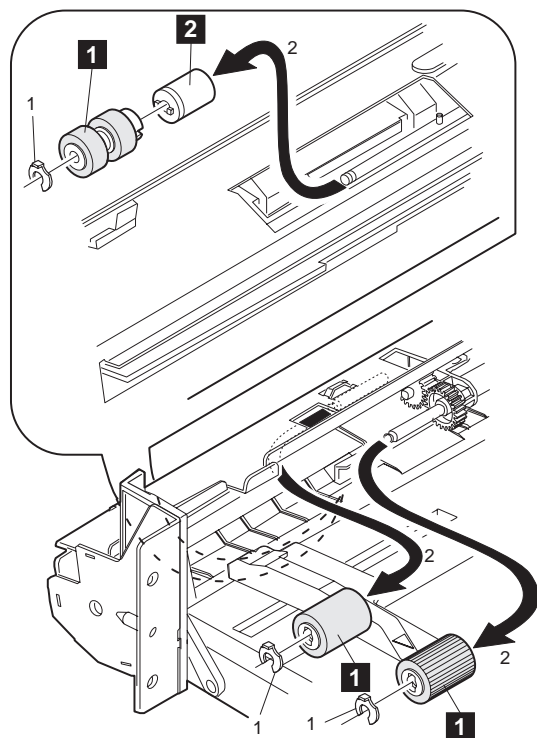
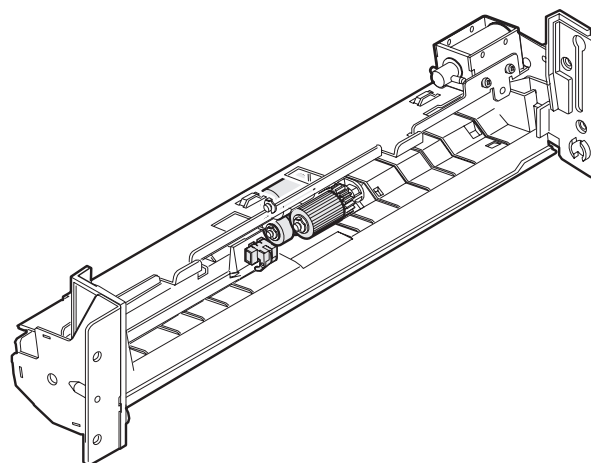
## G. Manual paper feed tray unit



### (1) Manual feed paper sensor



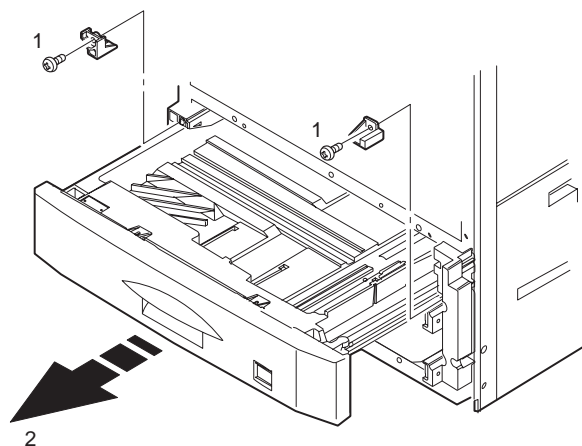
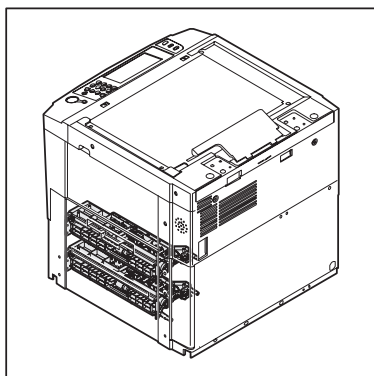
### (2) Rollers/torque limiters



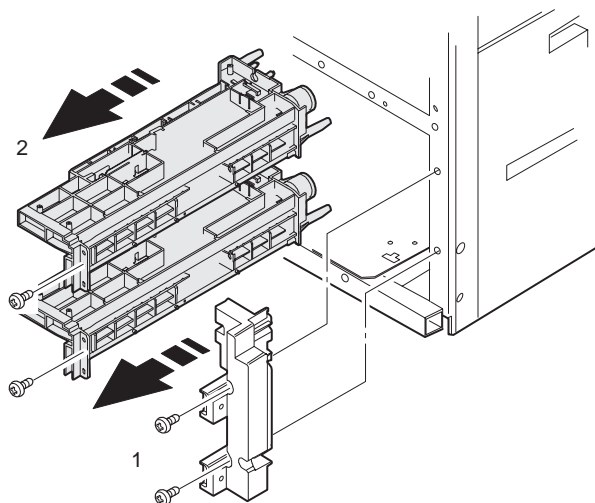
No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Rollers	Clean	80 K	90 K	125K	
		Check	80 K	90 K	125K	
		Replace	40 K or 2 years	40 K or 2 years	40K or 2 years	Reference: manual paper feed port counter
2	Torque limiter	Check	80 K	90 K	125K	
		Replace	120 K or 2 years	120 K or 2 years	120K or 2 years	Reference: manual paper feed port counter

## H. 500 tray paper unit

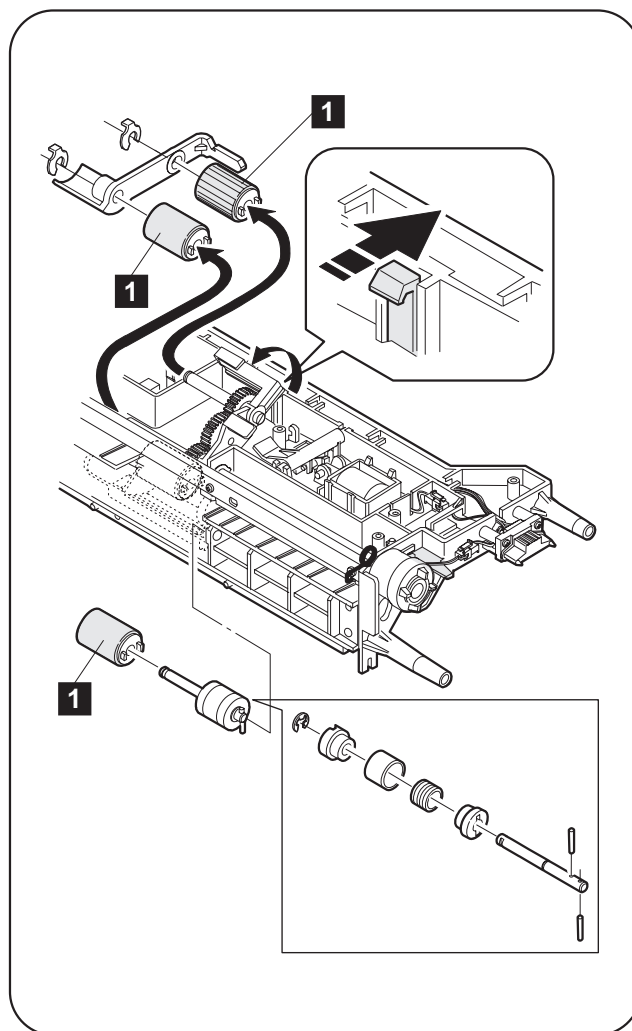
### (1) Tray unit



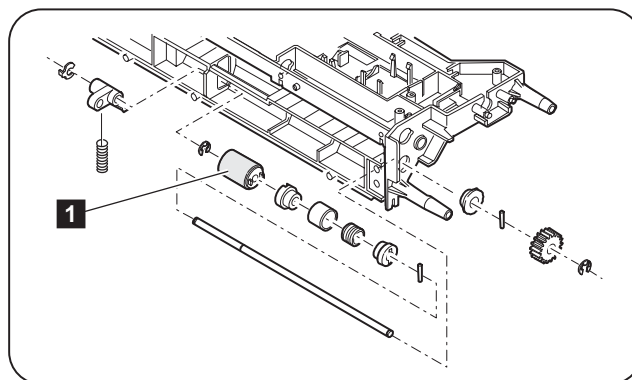
### (2) Tray paper feed unit



AR-250/280/281/285/286/335/336/405



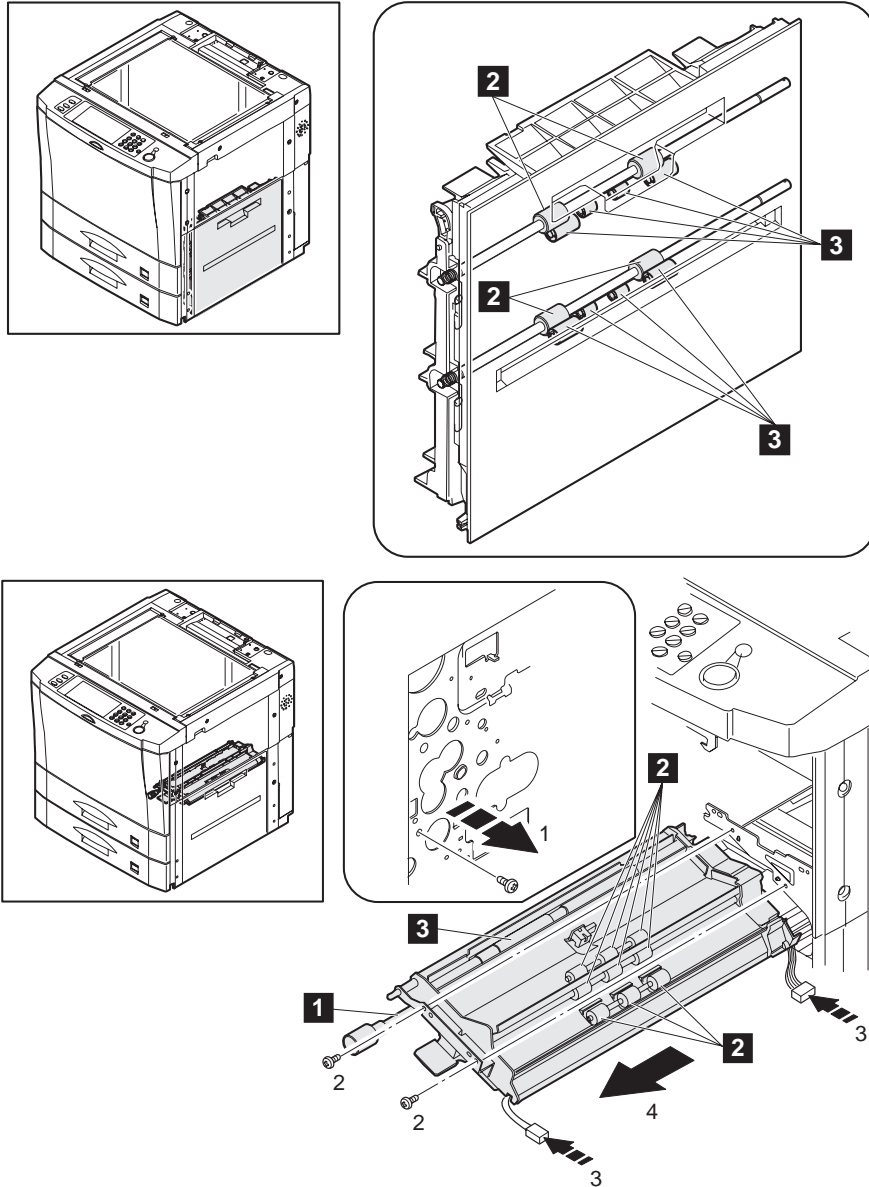
AR-501/505



No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Rollers	Clean	80 K	90 K	125K	Reference: paper fed port counter
		Check	80 K	90 K	125K	
		Replace	80 K or 2 years	80 K or 2 years	80K or 2 years	

## I. Paper transport section

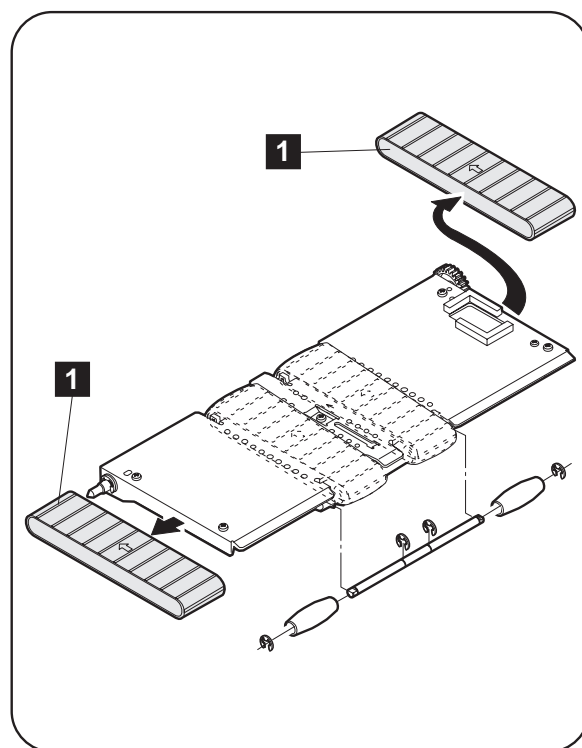
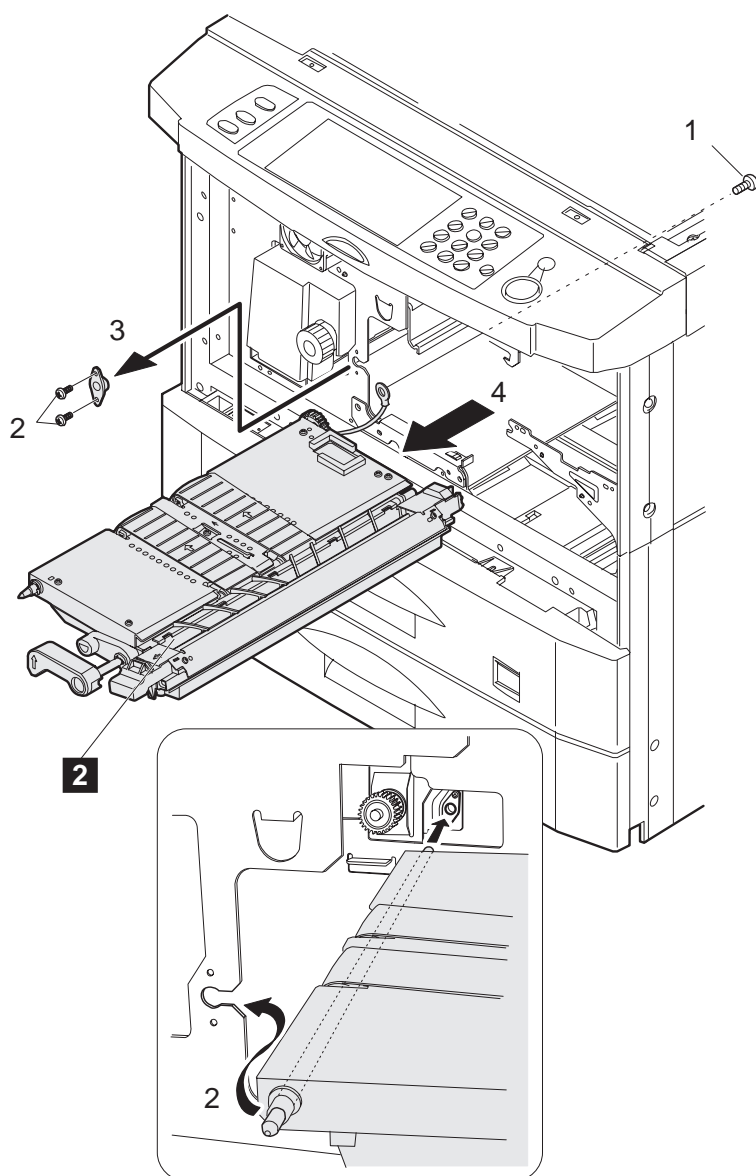
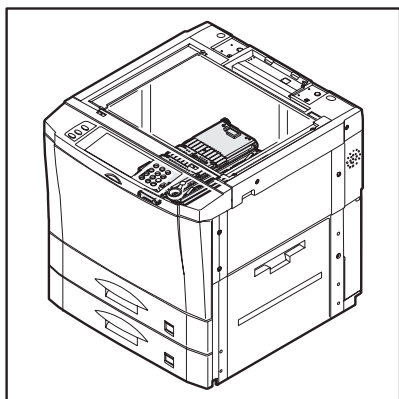
### (1) Paper transport section



No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Resist roller	Clean	80 K	90 K	125 K	
2	Transport rollers	Clean	80 K	90 K	125 K	
3	Rollers	Clean	80 K	90 K	125 K	



## J. Suction unit

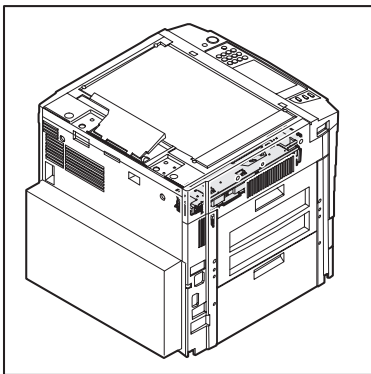


\* When assembling, be sure to connect the earth line.

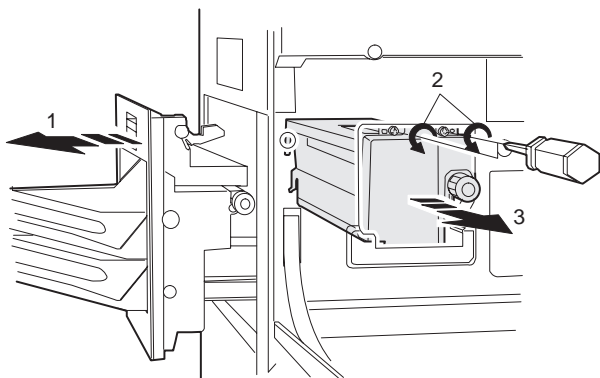
\* When installing the belt, install so that the arrow mark on the belt faces in the paper feed direction.

No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Suction belt	Clean	80 K	90 K	125K	
2	Separation lamp	Check	—	—	125K	

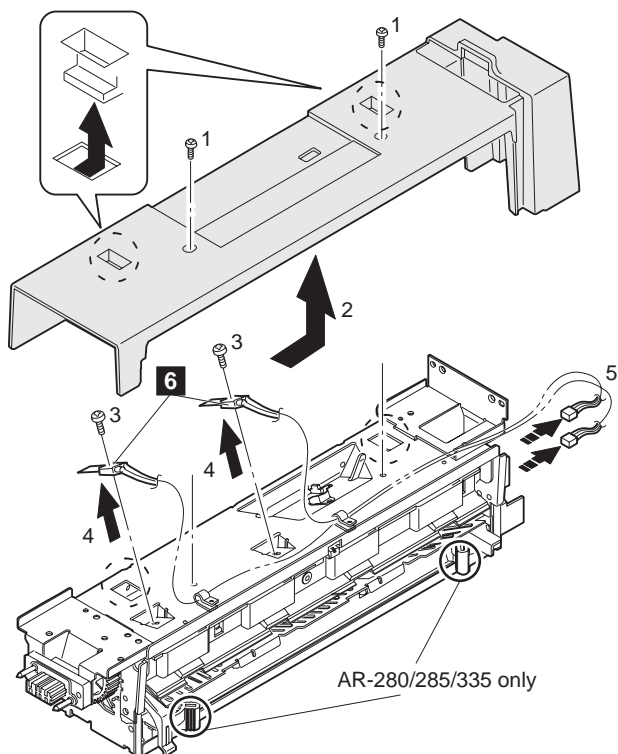
## K. Fusing unit



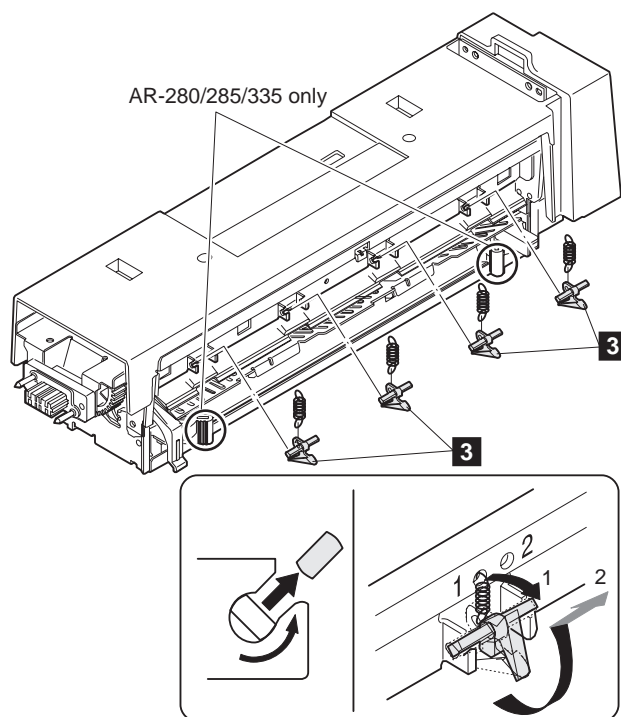
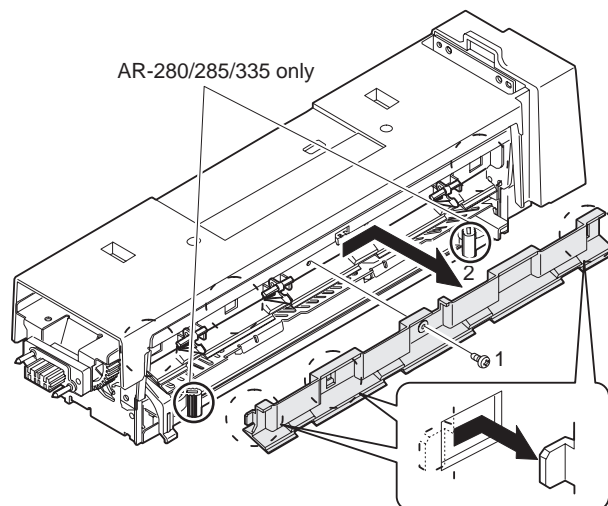
\* The fusing unit is heated to a very high temperature. When handling it, be careful of burning.



### (1) Thermistor

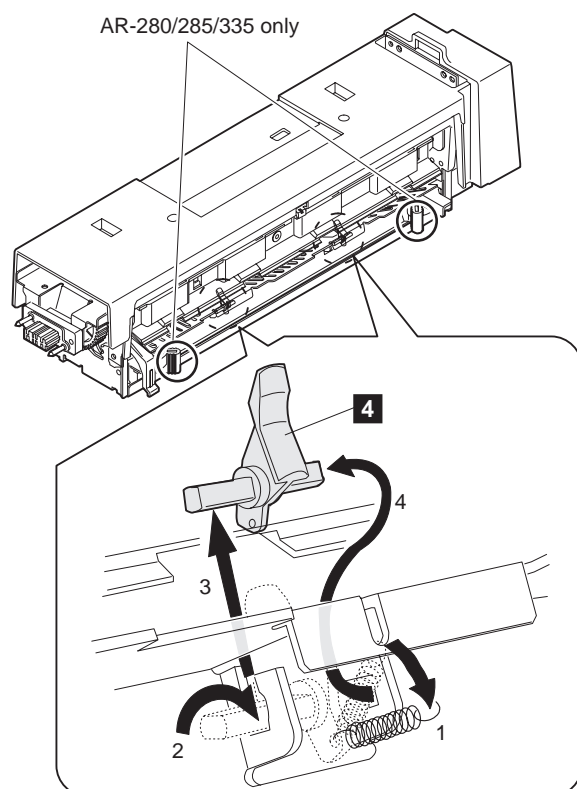
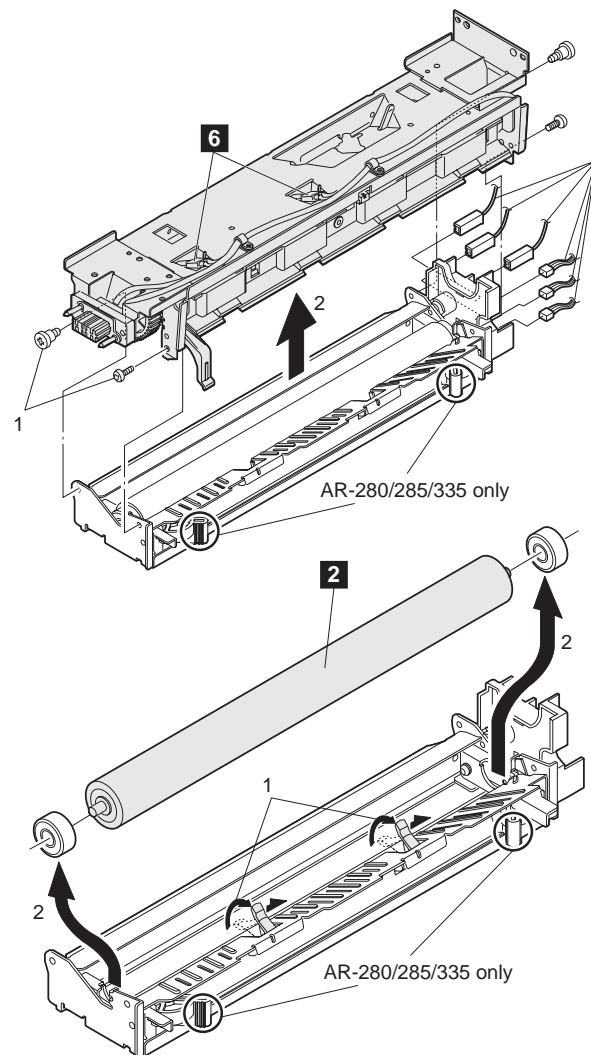
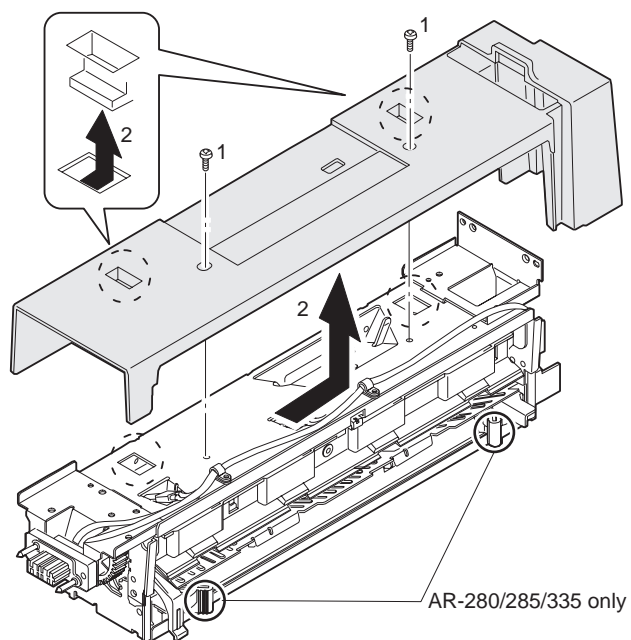
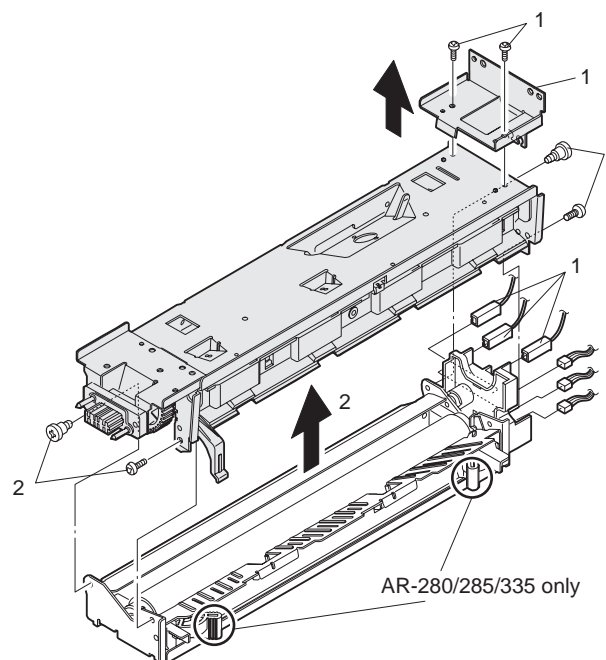


### (2) Upper fusing separation pawl

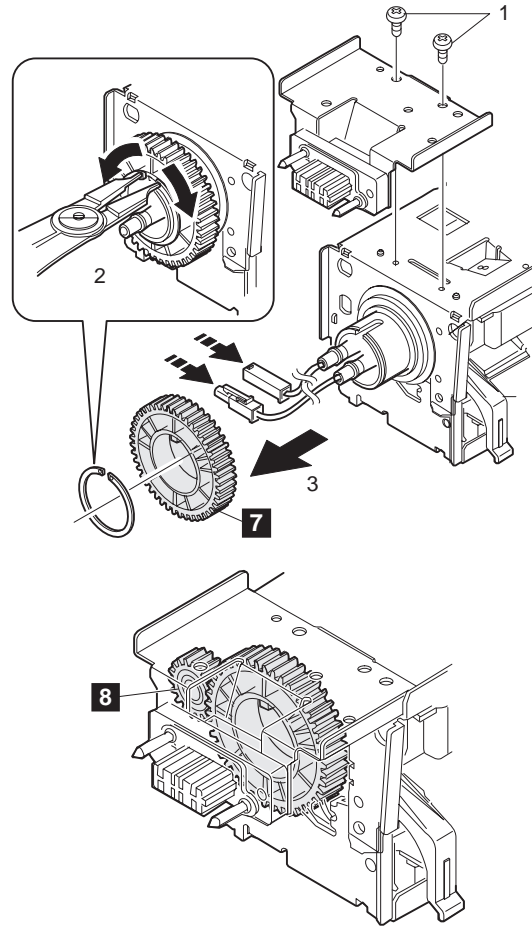
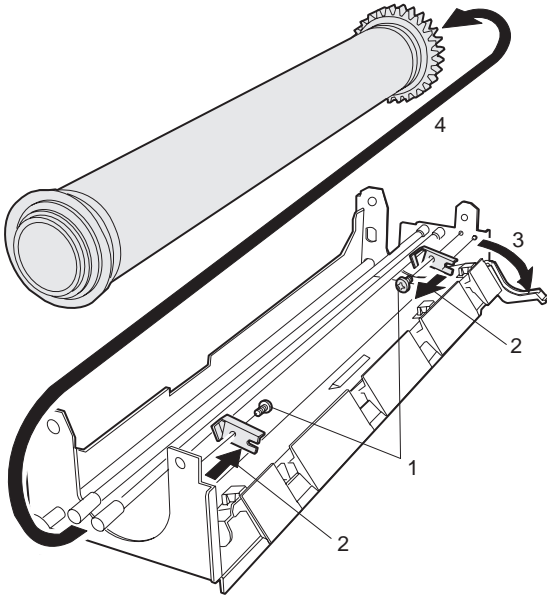
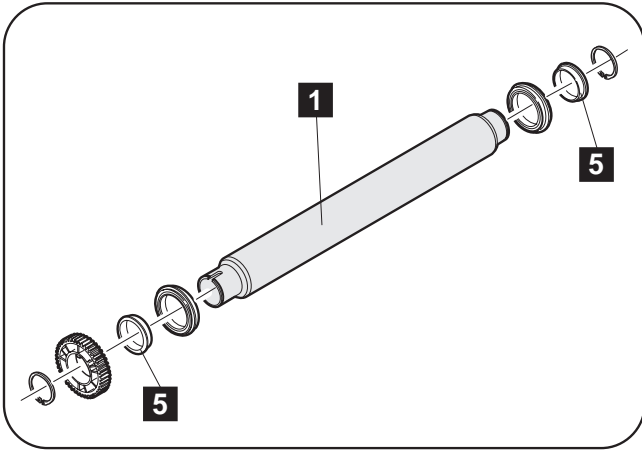


\* Put the spring on the side of "1".



**(3) Lower fusing separation pawl****(4) Lower heat roller****(5) Upper heat roller**

## (6) Upper heat roller gear



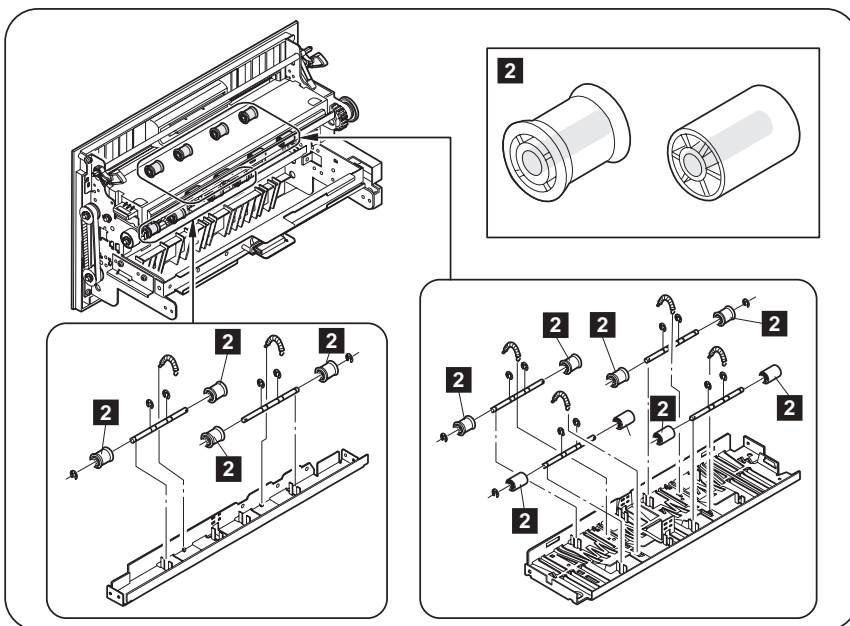
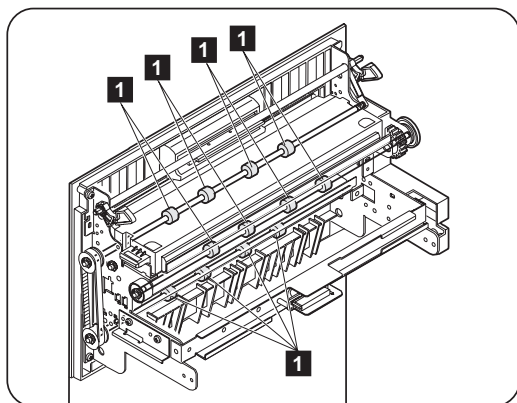
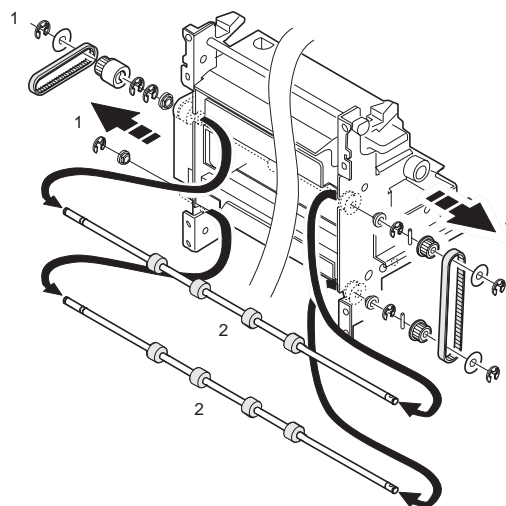
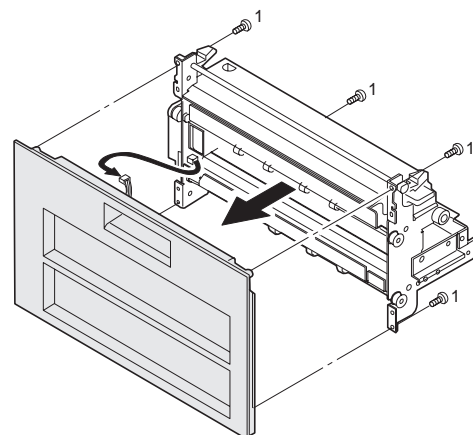
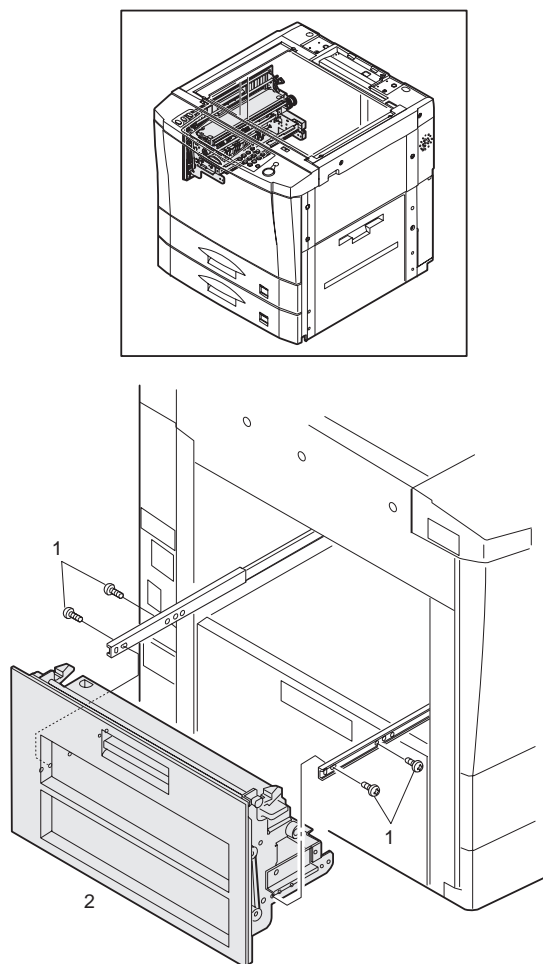
\* When assembling, install so that the bearing notches come to the outside of the frame both in the front and the rear sides.

No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
1	Upper heat roller	Clean	80 K	90 K	125K	
		Replace	160 K	180 K	250K	
2	Lower heat roller	Clean	80 K	90 K	125K	
		Replace	160 K	180 K	250K	
3	Upper separation pawl	Replace	80 K	90 K	125K	
4	Lower separation pawl	Replace	80 K	90 K	125K	
5	Insulation bush	Check	80 K	90 K	125K	
6	Thermistor	Check	80 K	90 K	—	
		Clean	—	—	125K	
7	Upper heat roller gear	Lubricate	80 K	90 K	125K	
		Replace	160 K	180 K	250K	
8	Gears	Lubricate	80K	90 K	125K	

\* When assembling the upper frame and the lower frame, press the upper frame securely to the lower frame and fix with the screw. If the frames are fixed loosely, defective fusing and paper wrinkles may occur.

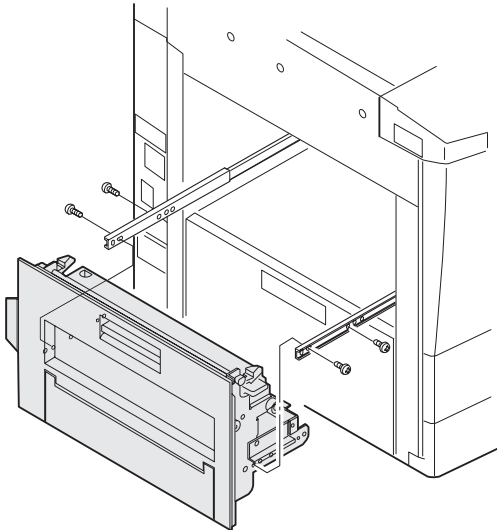
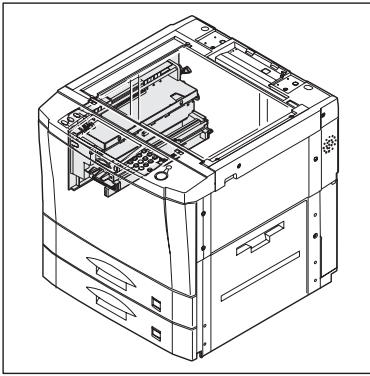
# L. Two-tray paper exit unit

## (1) Paper exit/transport roller

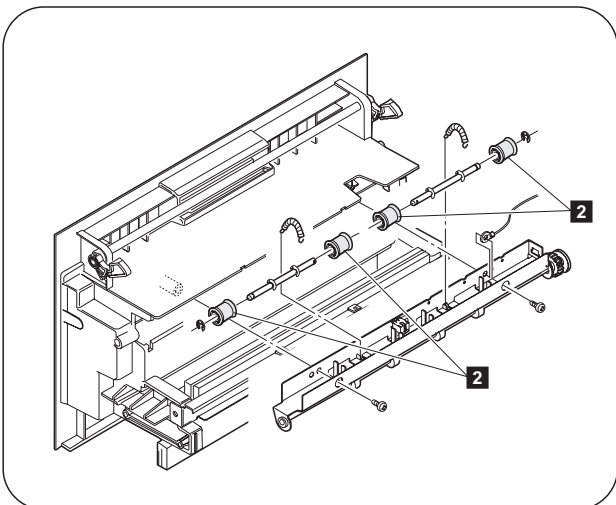
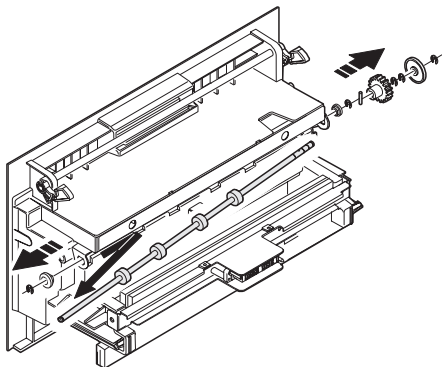


No.	Name	Work item	Cycle	Remark
1	Transport rollers	Clean	80 K	
2	Paper exit follower roller (inner surface)	Lubricate	80 K	

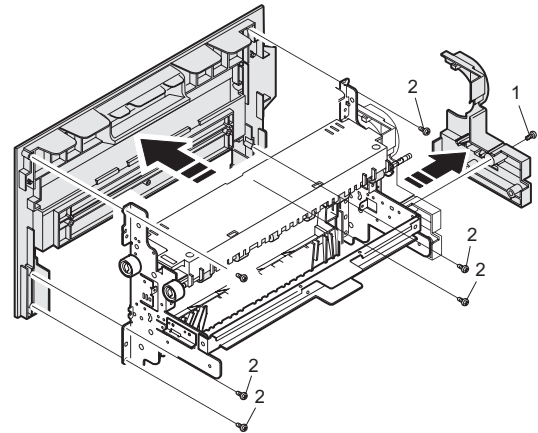
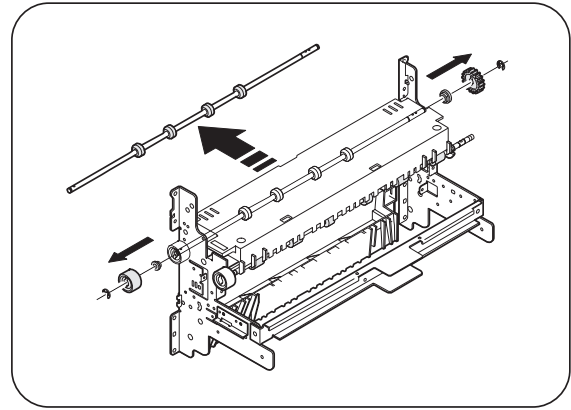
## M. One-tray paper unit



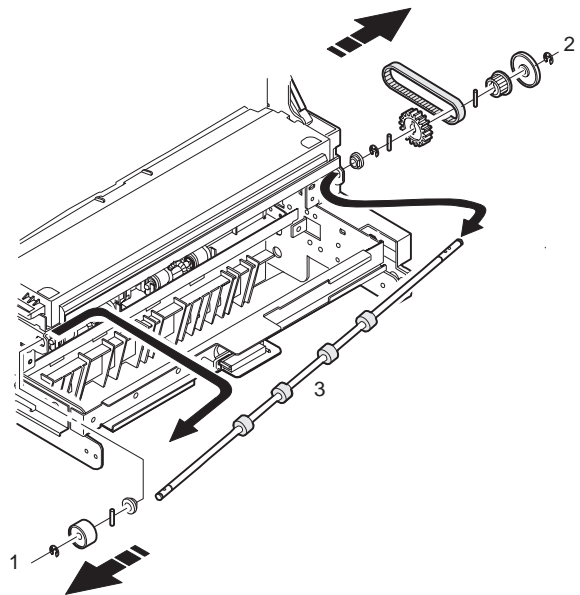
### (1) Paper exit roller



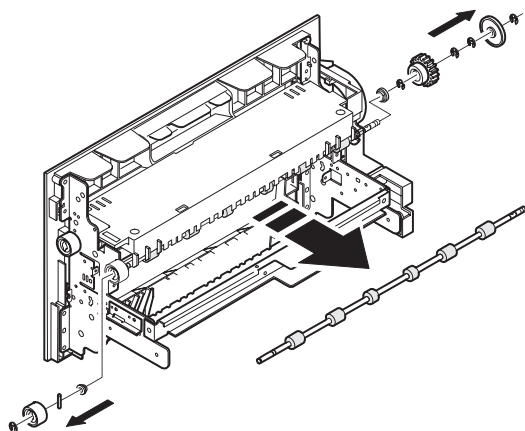
AR-501/505



### (2) Paper exit/transport roller



## AR-501/505



No.	Name	Work item	Cycle			Remark
			AR-280/285/335	AR-405	AR-501/505	
1	Transport rollers	Clean	80 K	90 K	125K	
2	Paper exit follower roller (inner surface)	Lubricate	80 K	90 K	—	
	Paper exit follower roller (inside)	Lubricate	—	—	125K	
3	Curl correction roller	Check	—	—	125K	
		Change	—	—	250K	
4	Transport paper guides	Clean	—	—	125K	

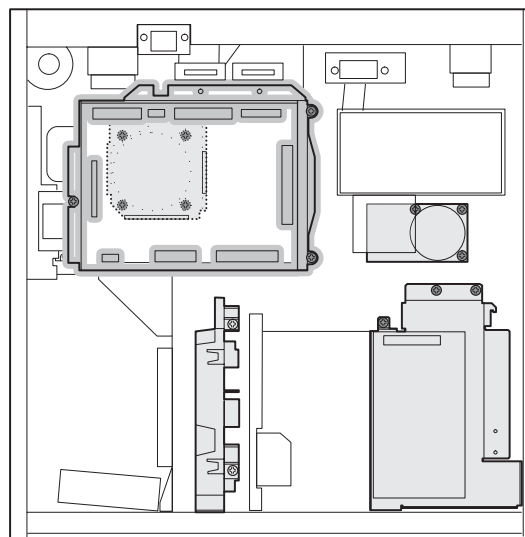
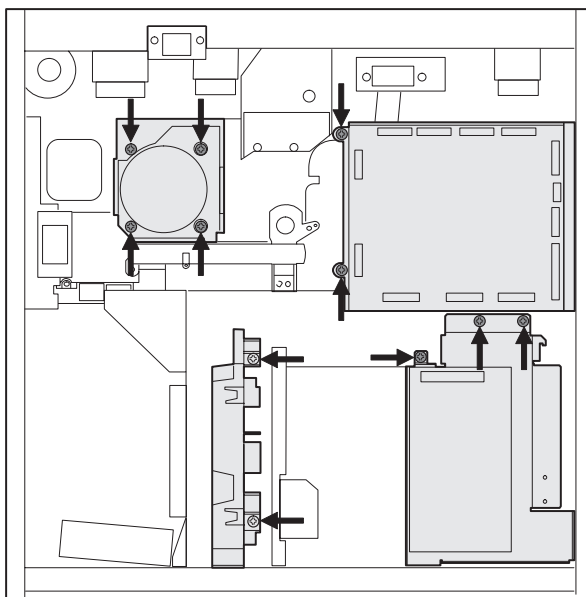
**N. PCU/AC power/High voltage power/Main motor**

\* Do not turn the flywheel manually. Otherwise, the gear may be broken.

**(1) PCU/AC power/High voltage power/Main motor**

AR-250/280/281/285/286/335/336/405

AR-501/505

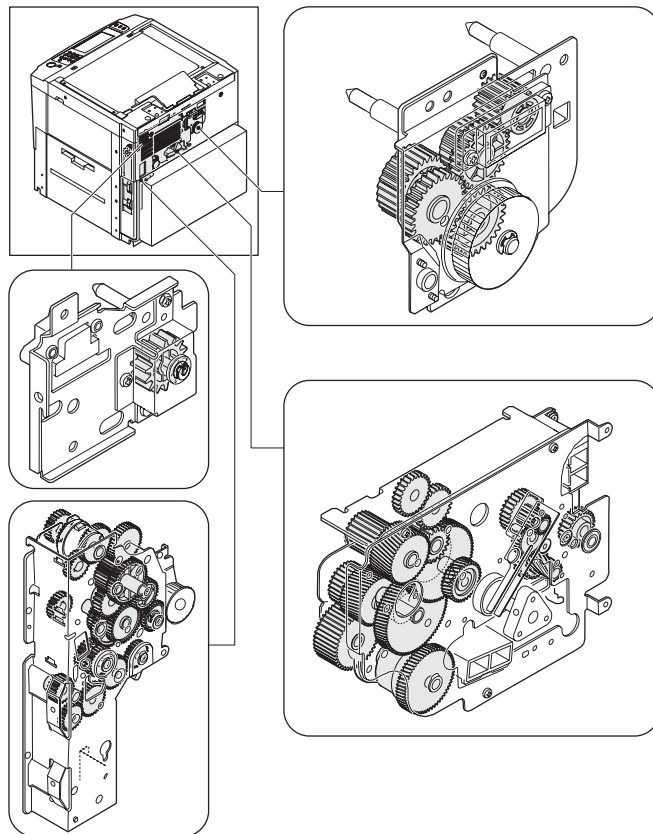


\* The PCU, AC power, the high voltage power, and the main motor can be removed by removing the screw shown with arrows.

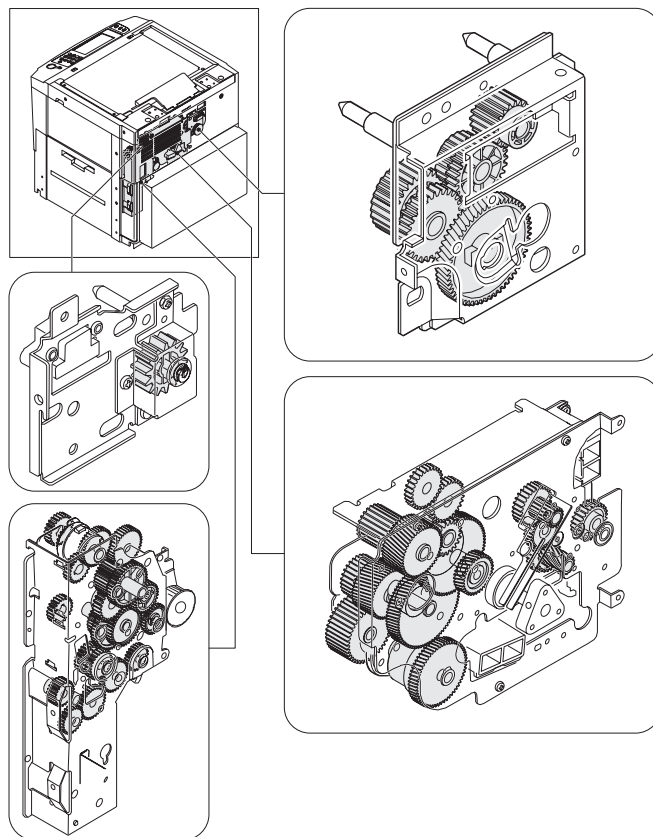


**O. Major drive unit**

AR-250/280/281/285/286/335/336/405

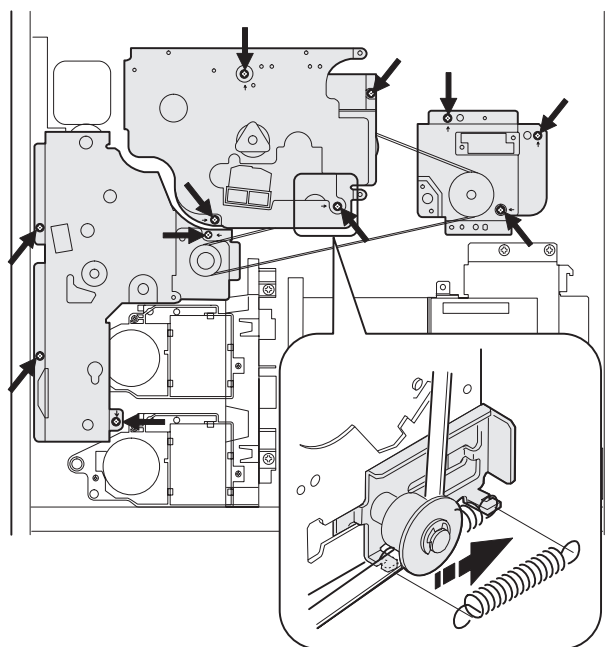
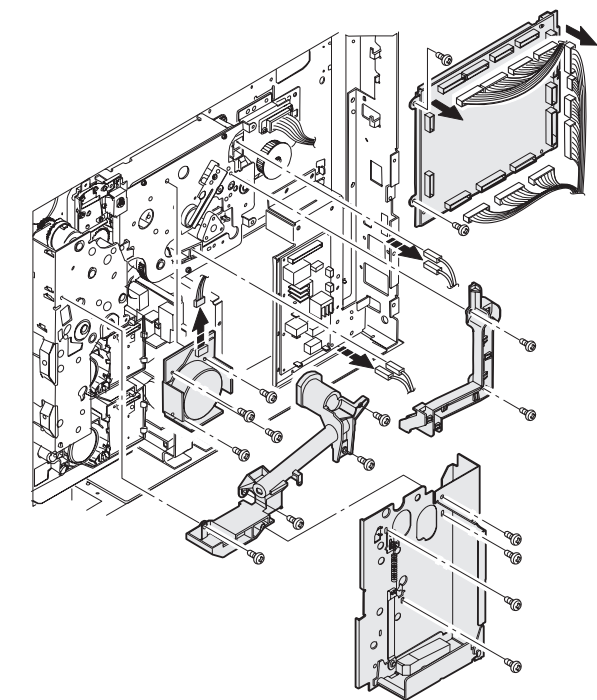


AR-501/505

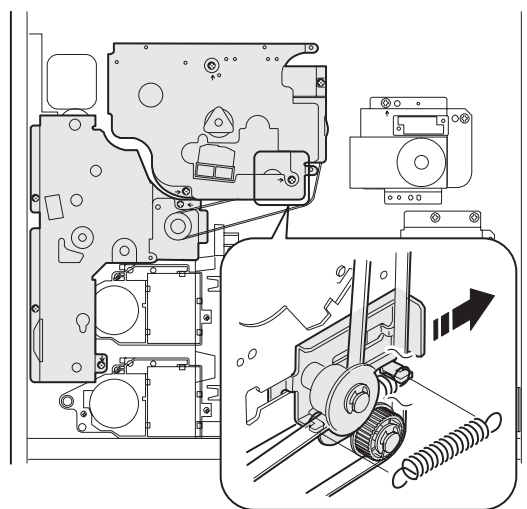
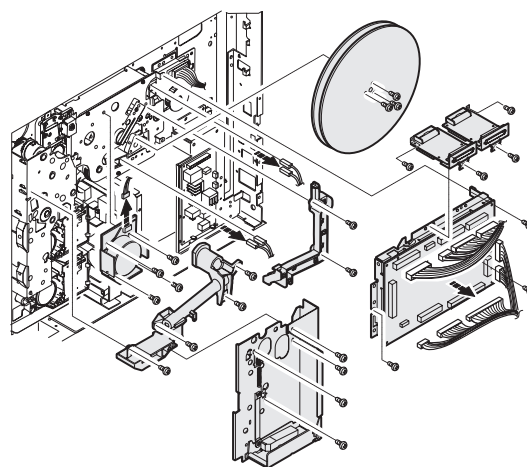


No.	Name	Work item	Cycle			Remark
			AR-250/280/281/ 285/286/335/336	AR-405	AR-501/505	
	Gears	Lubricate	80 K	90 K	125K	
	Belts	Check	240 K	270 K	250K	

AR-250/280/281/285/286/335/336/405

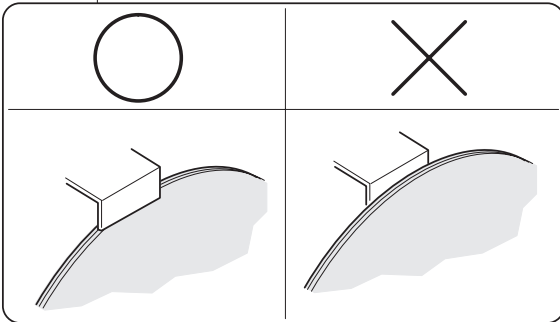
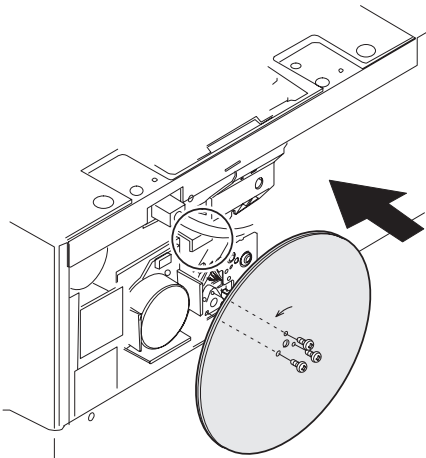


AR-501/505



\* Each drive unit can be removed by removing the screw shown with the arrow.

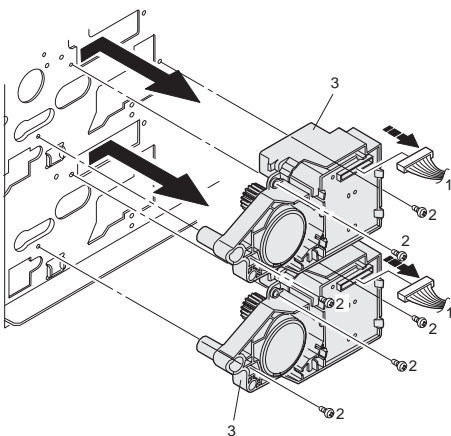
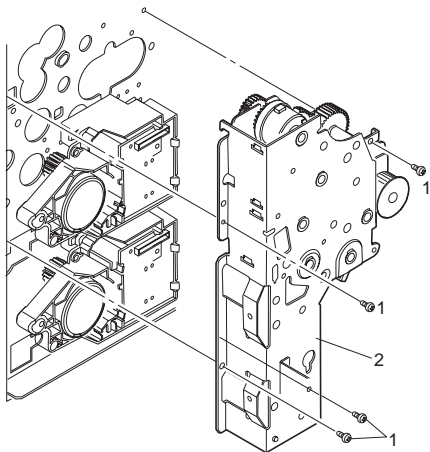
AR-250/280/281/285/286/335/336/405



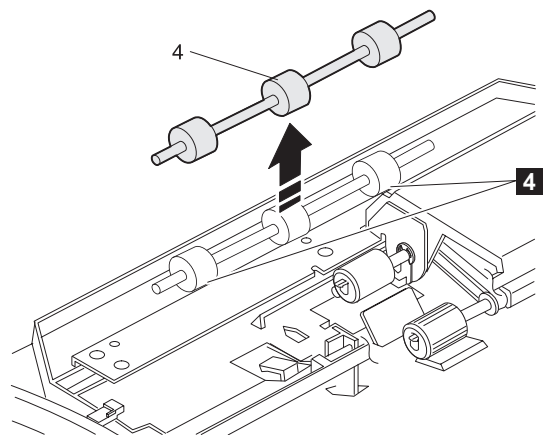
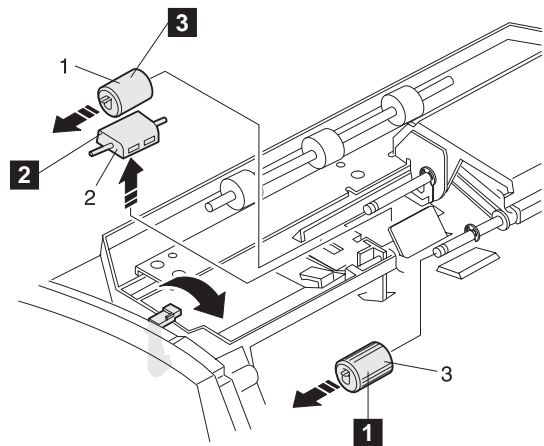
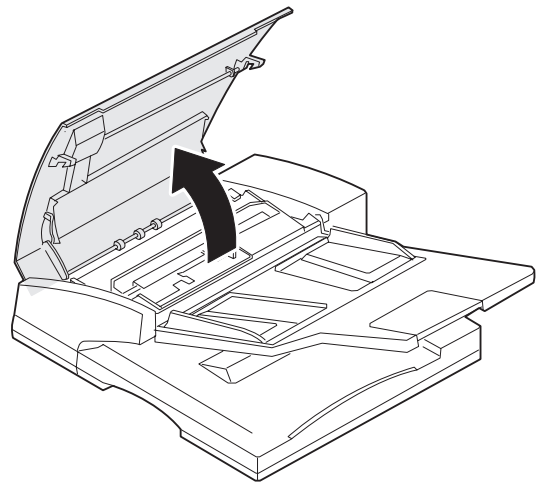
\* Note for assembly

- Be sure to attach the flywheel to inside of the guide.
- Attach so that the arrow faces the rotating direction.

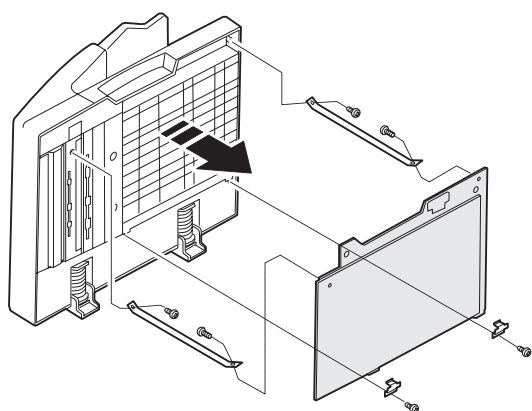
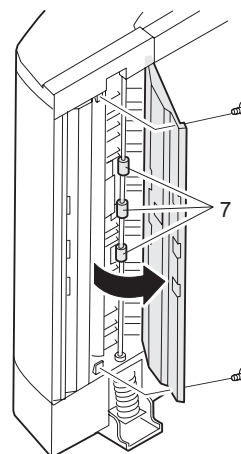
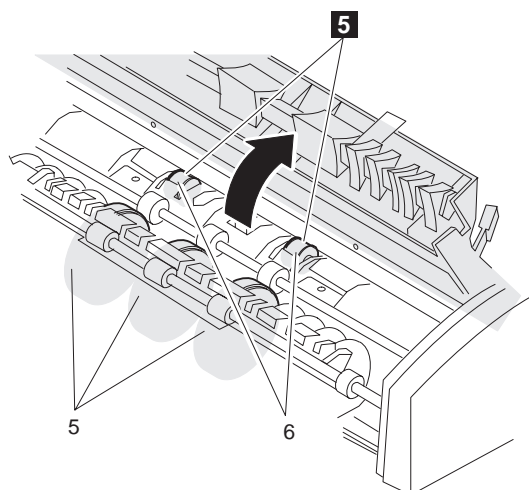
#### P. Lift-up unit



#### Q. RSPF







No.	Name	Work item	Cycle			Remark
			AR-335	AR-405	AR-501/505	
1	Pickup roller	Check	—	—	125 K	
2	Separation pad	Check	—	—	125 K	
3	Paper feed roller	Check	—	—	125 K	
4	Resist roller	Clean	—	—	125 K	
5	Paper exit roller	Clean	—	—	125 K	Wipe with alcohol for cleaning.
6	Transport roller	Clean	—	—	125 K	
7	Exposure section	Clean	—	—	125 K	
	Sensors	Clean	—	—	125 K	Blow air for cleaning.

## [9] TROUBLE CODE LIST

### 1. Trouble code

Trouble code	Content of trouble	Remark	Trouble detection
C1	00 MC trouble		PCU
C2	00 TC trouble		PCU
E7	00 ICU communication trouble		ICU
	01 Image data memory trouble		ICU
	02 Laser trouble		ICU
	03 HDD trouble		ICU
	10 Shading trouble (Black correction)		ICU
	11 Shading trouble (White correction)		ICU
	13 CCD light quantity check error		ICU
	90 ICU communication trouble		PCU
F1	00 Finisher communication trouble		PCU
	01 Finisher 1 jogger shift trouble / Finisher 2 alignment section abnormality		FIN
	02 Finisher transport motor abnormality		FIN
	03 Sorter guide bar oscillation motor trouble		SOT
	04 Finisher 1 elevator lower limit detection / Finisher 2 stack tray lower limit detection		FIN
	05 Finisher 1 elevator home / Finisher 2 stack tray sensor abnormality		FIN
	06 Finisher shift motor abnormality		FIN
	08 Finisher staple shift motor trouble		FIN
	10 Finisher staple unit operation trouble		FIN
	11 Finisher 1 pusher motor trouble / Finisher 2 boomerang rotation abnormality		FIN
	14 Finisher 2 stack tray abnormality		FIN
	15 Finisher 1 elevator motor trouble / Finisher 2 stack tray motor lock		FIN
	16 Staple sorter holding motor trouble		SOT
	17 ST paper exit roller pressure release trouble		FIN
	18 Tray 3 paper exit paddler operation trouble		FIN
	50 Non-support trouble in automatic detection of option connection (Sorter, finisher)		PCU
	80 Finisher power not supplied		FIN
F2	00 Toner control sensor open		PCU
	02 Toner motor connector unconnected		PCU
	31 Process control trouble (OPC drum surface reflection rate abnormality)		PCU
	32 Process control trouble (Drum marking scanning trouble)		PCU
	37 Drum marking sensor gain adjustment error		PCU
	39 Process thermistor breakdown		PCU
F3	12 Copier top stage CS lift up trouble		PCU
	22 Copier bottom stage CS lift up trouble		PCU
F9	00 Printer communication trouble		ICU
	01 PRT DRAM trouble		PRT
	02 PRT Centropoint check error		PRT
	03 Network card trouble		
	04 Printer program error		
	10 PRT SCSI LSI abnormality		ICU
	90 Printer communication trouble		PRT
H2	00 Thermistor open (HL1)		PCU
	01 Thermistor open (HL2)		PCU
H3	00 Heat roller high temperature detection (HL1)		PCU
	01 Heat roller high temperature detection (HL2)		PCU
H4	00 Heat roller low temperature detection (HL1)		PCU
	01 Heat roller low temperature detection (HL2)		PCU

Trouble code	Content of trouble	Remark	Trouble detection
H5	01 3 continuous POD1 not-reaching JAM detection		PCU
	02 Fusing thermistor abnormality		PCU
L1	00 Scanner feed trouble		PCU
L3	00 Scanner return trouble		PCU
L4	01 Main motor lock detection		PCU
L6	10 Polygon motor lock detection		ICU
L8	01 No full-wave signal		PCU
	02 Full-wave signal width abnormality		PCU
U2	00 EEPROM read/write error		ICU
	11 Counter check sum error (EEPROM)		ICU
	12 Adjustment value check sum error (EEPROM)		ICU
U4	02 ADU alignment plate operation abnormality		PCU
	03 ADU rear edge plate operation abnormality		PCU
U5	00 RADF/SPF/RSPF communication trouble		PCU
	01 RADF resist sensor trouble		RADF
	02 RADF eject/inversion sensor trouble		RADF
	03 RADF timing sensor trouble		RADF
	06 RSPF post-separation sensor trouble		RSPF
	07 RSPF read sensor trouble		RSPF
	08 RSPF SB sensor trouble		RSPF
	11 RADF paper feed motor operation abnormality		RADF
	16 RSPF fan motor operation abnormality		RSPF
U6	00 Desk communication trouble		PCU
	01 Desk 1 CS lift up trouble		Desk
	02 Desk 2 CS lift up trouble		Desk
	03 Desk 3 CS lift up trouble		Desk
	08 Desk 24V power abnormality		Desk
	09 LCC lift motor trouble		LCC
	10 Desk transport motor trouble		Desk
	20 LCC communication trouble		PCU
	21 LCC transport motor trouble		LCC
	22 LCC 24V power abnormality		LCC
	50 Non-support trouble in automatic detection of option connection (Desk unit)		PCU
	51 Non-support trouble in automatic detection of option connection (LCC unit)		PCU
U7	00 RIC communication trouble		PCU
U9	00 Operation control communication trouble		ICU
	90 Operation control communication trouble		OPE
EE	EL Auto developing adjustment trouble (Overtoner)	In SIM only	PCU
	EU Auto developing adjustment trouble (Undertonar)	In SIM only	PCU
FC	00 ASK/IrDA modulation LSI reset error		
	01 ASK/IrDA switch error		
PC	Personal counter not installed		ICU
PF	RIC copy inhibit command reception		ICU
--	Auditor not ready		ICU

## 2. Self diagnostics

Trouble code		Description	
Main code	Sub code		
C1	00	Content	MC trouble
		Detail	Main charger output error (output released) Trouble signal from high-voltage transformer
		Cause	Main charger improperly installed Main charger improperly assembled High-voltage transformer connector removed High-voltage harness removed or wire broken
		Check and remedy	Check main charger output with SIM8-2. Check main charger connector for disconnection. Replace high-voltage unit.
C2	00	Content	TC trouble
		Detail	Transfer charger output error (output short-circuiting) Trouble signal from high-voltage transformer
		Cause	Transfer charger contaminated with foreign matter Transfer charger wire broken High-voltage transformer connector disconnected
		Check and remedy	Check transfer charger output with SIM8-6. Replace high-voltage unit.
E7	00	Content	ICU communication trouble (ICU detection)
		Detail	Communication setup error, framing/parity/protocol error
		Cause	Slave unit PWB connector improper connection Slave unit PWB – ICU PWB harness trouble Connector pin breakage of the motor PWB of the slave unit PWB Slave unit ROM trouble. no ROM, ROM reverse insertion, ROM pin breakage
		Check and remedy	Connect the connector of the slave unit PWB and the ICU PWB. Check the connection and the harness. Check the grounding of the copier. Check the ROM of the slave unit PWB.
	01	Content	Image data memory trouble
		Detail	The ICU image data memory (SIMM) is detected only as 8MB or less. The SIMM capacity is insufficient for the model.
		Cause	The ICU PWB SIMM is not installed. The ICU PWB SIMM does not work properly. The ICU PWB SIMM is not installed properly. ICU PWB abnormality
		Check and remedy	Check installation of the ICU PWB SIMM. Check the SIMM capacity with SIM 22-10. Replace the ICU PWB SIMM.

Trouble code		Description	
Main code	Sub code		
E7	02	Content	Laser trouble
		Detail	BD signal from LSU kept at OFF or ON
		Cause	Connector to LSU or harness inside LSU disconnected or wire broken Polygon motor improperly rotating Laser home position sensor improperly positioned inside LSU Laser power supply line does not have proper voltage Laser LED improperly lighting ICU PWB error
		Check and remedy	Check LSU connector for disconnection. Check LSU operation with SIM61-1. Check polygon motor for rotation. Check laser LED for lighting. Replace LSU unit. Replace ICU PWB.
	03	Content	HDD trouble
		Detail	HDD is not recognized in the model with HDD installed.
		Cause	The HDD is not installed to the ICU PWB. The HDD does not work properly in the ICU PWB. The HDD is not installed to the ICU PWB properly. ICU PWB abnormality
		Check and remedy	Check installation of the HDD to the ICU PWB. Check connection of the HDD harness to the ICU. Replace the HDD. Replace the ICU PWB.
	10	Content	Shading trouble (black correction)
		Detail	Improper CCD black reading level for copy lamp going out
		Cause	Improper installation of flat cable to CCD unit CCD unit error ICU PWB error
		Check and remedy	Check flat cable to CCD unit for installation. Check CCD unit. Check ICU PWB.
	11	Content	Shading trouble (white correction)
		Detail	Improper CCD white reference plate reading level for copy lamp lighting
		Cause	Improper installation of flat cable to CCD unit Mirror, lens or reference white plate contaminated Copy lamp operation error Improperly installed CCD unit CCD unit error ICD PWB error
		Check and remedy	Clean mirror, lens, or reference white plate. Check copy lamp for light amount (SIM5-3) and lighting. Check CCD unit. Check ICU PWB.

Trouble code		Description	
Main code	Sub code		
E7	13	Content	CCD light quantity check error
		Detail	Copy lamp light amount adjustment in shading cannot be made
		Cause	Copy lamp does not light (broken wire, improper installation) Improper installation of flat cable to CCD unit Improper connection of copy lamp CL lead wire Mirror, lens, or reference white plate Dirt or dew Improper output of copy lamp power supply Improper installation of CCD unit CCD unit error ICU PWB error
		Check and remedy	Clean mirror, lens, reference white plate. Check copy lamp for light amount (SIM5-3) and lighting. Check CCD unit. Check ICU PWB.
	90	Content	ICU communication trouble (PCU detection)
		Detail	Communication setup error/framing/parity/protocol error
		Cause	Slave unit PWB connector improper connection Slave unit PWB – ICU PWB harness trouble Slave unit PWB mother board connector pin breakage
		Check and remedy	Check the slave unit PWB and the ICU PWB connector connection. Check the copier earth.
	00	Content	Finisher communication trouble
		Detail	Communication line test error occurs when power is turned on or after the exit of a simulation mode. Improper communication with sorter
		Cause	Improper connection or broken wire of connector or harness between copier and sorter Finisher control PWB defective Control PWB (PCU) defective Malfunction due to noise
		Check and remedy	Clear by turning the power supply OFF/ON. Check communication line connector and harness. Replace Finisher control PWB or PCU PWB.
F1	01	Content	Finisher1 jogger shift trouble / Finisher 2 alignment section abnormality
		Detail	Jogger shift trouble / Alignment plate shift trouble
		Cause	Motor lock Motor rpm abnormality Motor overcurrent Finisher control PWB trouble
		Check and remedy	Check the jogger motor operation with SIM 3-3.
	00	Content	Finisher communication trouble
		Detail	Communication line test error occurs when power is turned on or after the exit of a simulation mode. Improper communication with sorter
		Cause	Improper connection or broken wire of connector or harness between copier and sorter Finisher control PWB defective Control PWB (PCU) defective Malfunction due to noise
		Check and remedy	Clear by turning the power supply OFF/ON. Check communication line connector and harness. Replace Finisher control PWB or PCU PWB.

Trouble code		Description	
Main code	Sub code		
F1	02	Content	Finisher transport motor abnormality
		Detail	Transport motor drive trouble
		Cause	Motor lock
		Check and remedy	Check transport motor operation with SIM3-3.
	03	Content	Sorter guide bar oscillation motor trouble
		Detail	Sorter guide bar oscillation motor drive abnormality
		Cause	Motor lock. Motor rotation abnormality. Overcurrent to motor Sorter control PWB abnormality
		Check and remedy	Check the guide bar motor operation with SIM3-3.
	04	Content	Finisher 1 elevator lower limit detection/ Finisher 2 stack tray lower limit detection
		Detail	When the bin is shifted, the upper limit or the lower limit sensor is detected. / The elevator exceeds the lower limit.
		Cause	Sensor defective Sorter/finisher control PWB abnormality
		Check and remedy	Check sensor with SIM3-2.
	05	Content	Finisher 1 elevator home / Finisher 2 stack tray sensor abnormality
		Detail	The elevator does not detect the home position. / Stack tray sensors are turned on in the abnormal combination.
		Cause	Sensor defective Sorter/finisher control PWB abnormality
		Check and remedy	Check sensor with SIM3-2.
	06	Content	Finisher shift motor abnormality
		Detail	1) Bin shift is not completed within 2.5 seconds after bin shift request
		Cause	Motor lock Improper motor speed Overcurrent to motor Finisher control PWB defective
		Check and remedy	Check bin shift motor operation with SIM3-4.
	08	Content	Finisher staple shift motor trouble
		Detail	Staple motor drive trouble
		Cause	Motor lock Motor rpm abnormality Overcurrent to motor Finisher control PWB trouble
		Check and remedy	Check the operation of the staple motor with SIM 3-3.
	10	Content	Finisher staple unit operation trouble
		Detail	Staple operation trouble
		Cause	Motor lock Motor rpm abnormality Motor overcurrent Finisher control PWB trouble
		Check and remedy	Check the staple motor operation with SIM 3-3.

Trouble code		Description	
Main code	Sub code		
F1	11	Content	Finisher 1 pusher motor trouble / Finisher 2 boomerang rotation abnormality
		Detail	Pusher motor trouble / Paddle solenoid abnormality
		Cause	Motor lock / paddle solenoid operation abnormality / boomerang rotation sensor abnormality Motor rpm abnormality Motor overcurrent Finisher control PWB abnormality
		Check and remedy	Check the finisher motor operation, the paddle solenoid operation with SIM 3-3 or check the boomerang rotation sensor with SIM 3-2.
	14	Content	Finisher 2 stack tray abnormality
		Detail	Stack tray control sensor abnormality
		Cause	The paper surface sensor and the full stack sensor do not turn on even when a certain time is passed after starting the tray.
		Check and remedy	Check the sensor operation with SIM 3-2.
	15	Content	Finisher 1 elevator motor trouble / Finisher 2 stack tray motor lock
		Detail	Elevator motor trouble
		Cause	Motor lock Motor rpm abnormality Motor overcurrent Finisher control PWB trouble
		Check and remedy	Check the elevator motor operation with SIM 3-3.
	16	Content	Staple sorter holding motor trouble
		Detail	During rotation of the holding motor, the rotation pulse is not detected for 0.05sec or more.
		Cause	Motor lock. Motor rotation abnormality. Overcurrent to motor Sorter control PWB abnormality
		Check and remedy	Check the holding motor operation with SIM3-3.
	17	Content	ST pressure release HP trouble
		Detail	ST paper exit roller pressure release trouble when turning on the power/initializing
		Cause	ST paper exit roller pressure release clutch abnormality ST paper exit roller pressure release clutch HP sensor abnormality
		Check and remedy	Stop the transport motor in SIM 3-3, turn on the STORCL to check that the pressure release roller operates. Check the STORHP sensor with SIM 3-2.
	18	Content	Tray 3 paper exit paddler operation trouble
		Detail	Tray 3 paper exit paddler operation trouble when turning on the power/initializing
		Cause	Tray 3 paper exit paddler solenoid abnormality Tray 3 paper exit paddler HP sensor abnormality Finisher control PWB trouble
		Check and remedy	Operate the transport motor with SIM 3-3 and turn on T3PDSL to check that tray 3 paddler operates. Check T3PDHP sensor with SIM 3-2.

Trouble code		Description	
Main code	Sub code		
F1	50	Content	Non-support trouble in automatic detection of option connection (Sorter, finisher)
		Detail	In automatic detection of option connection, a non-support finisher or a sorter is detected.
		Cause	A non-support finisher or a sorter is connected to the copier.
		Check and remedy	Check the finisher or the sorter.
	80	Content	Finisher power not supplied
		Detail	24V power is not supplied to the finisher PWB.
		Cause	Connector harness improper connection or disconnection Finisher control PWB trouble Power unit trouble
		Check and remedy	Check the sensor operation with SIM 3-2.
	F2	Content	Toner control sensor open
		Detail	Toner control sensor output open
		Cause	Connector harness trouble Connector unconnected.
		Check and remedy	Check connection of the toner control sensor. Check connection of the connector harness with the main PWB. Check for disconnection of the harness.
	02	Content	Toner motor connector unconnected
		Detail	Connection detection signal with toner motor is OFF
		Cause	Connector harness defective Connector disconnected
		Check and remedy	Check toner motor connector for connection. Check connector harness to main PWB for connection. Check harness for broken wire.
	31	Content	Process control trouble (OPC drum surface reflection rate abnormality)
		Detail	Usually the sensor gain is adjusted so that the output is a certain value, by reading the drum base surface with the image density sensor before starting process control. However, a certain output is not obtained by adjusting the sensor gain.
		Cause	Image density sensor defective
		Check and remedy	Check process control sensor output with SIM44-2. (Do not adjust) If the result is far different from the specified value, it suggests the sensor is defective. Check the sensor and harness. If the deviation is relatively small, check the sensor and drum surface for contamination.

Trouble code		Description	
Main code	Sub code		
F2	32	Content	Process control trouble (Drum marking scanning trouble)
		Detail	Usually the sensor gain is adjusted so that the output is a certain value, by reading the drum base surface with the drum marking sensor before starting process control. However, a certain output is not obtained by adjusting the sensor gain.
		Cause	Drum marking sensor defective Improper connection of harness between PCU PWB and drum marking sensor Drum marking sensor contaminated OPC drum cleaning improper Charging voltage improper
		Check and remedy	Check process control output with SIM44-02. (Do not adjust.) If the result is far different from the specified value, it suggests the sensor is defective. Check the sensor and harness. If the deviation is relatively small, check the sensor and drum surface for contamination.
	37	Content	Drum marking sensor gain adjustment error
		Detail	When the drum marking area surface is scanned with the drum marking sensor before starting process control and the sensor gain is adjusted until a constant output is provided, the output is not constant though the sensor gain is changed.
		Cause	Drum marking sensor trouble Improper connection between PCU PWB and drum marking sensor Drum marking sensor is dirty OPC drum cleaning trouble
		Check and remedy	Perform the gain adjustment of process control sensor with SIM 44-2. If ERROR is displayed, it may be a breakdown. Check the sensor and the harness. When the adjustment is completed, check the drum surface conditions.
	39	Content	Process thermistor breakdown
		Detail	The process thermistor is open.
		Cause	Process thermistor abnormality Improper connection of the process thermistor bar PCU PWB abnormality
		Check and remedy	Check connection of the process thermistor harness and connector. Check the PCU PWB.
	12	Content	Copier top stage CS lift up trouble
		Detail	UPED does not turn on within the specified time. ULUD does not turn on within the specified time.
		Cause	UPED or ULUD defective Upper cassette lift-up motor defective Improper connection of harness between PCU PWB, lift-up unit, and paper feed unit.
		Check and remedy	Check UPED, ULUD and their harness and connector. Check lift-up unit.

Trouble code		Description	
Main code	Sub code		
F3	22	Content	Copier bottom stage CS lift up trouble
		Detail	LPED does not turn on within the specified time. LLUD does not turn on within the specified time.
		Cause	LPED or LLUD defective Lower cassette lift-up motor defective Improper connection of harness between PCU PWB, lift-up unit, and paper feed unit.
		Check and remedy	Check LPED, LLUD, their harnesses and connectors. Check lift-up unit.
	00	Content	Printer communication trouble (ICU detection)
		Detail	Communication setup error, framing/parity/protocol error
		Cause	Slave unit PWB connector improper connection Slave unit PWB – ICU PWB harness trouble Connector pin breakage of the motor PWB of the slave unit PWB Slave unit ROM trouble. no ROM, ROM reverse insertion, ROM pin breakage
		Check and remedy	Connect the connector of the slave unit PWB and the ICU PWB. Check the connection and the harness. Check the grounding of the copier. Check the ROM of the slave unit PWB.
	01	Content	PRT DRAM trouble
		Detail	Option printer PWB DRAM trouble (Check when turning on the power.)
		Cause	DRAM module is broken and access cannot be made. DRAM module improper installation
		Check and remedy	Check with SIM 67-1.
	03	Content	Network card trouble.
		Detail	Network card self test trouble.
		Cause	Network card defect. Printer PWB defect. Network card connector connection defect.
		Check and remedy	Check the Network card connector. Replace the printer PWB. Replace the Network card.
	04	Content	Printer program error.
		Detail	Program data trouble in the option printer board.
		Cause	Flash memory data is destroyed.
		Check and remedy	Replace or rewrite the Flash memory. Replace the printer PWB.
	10	Content	PRT SCSI LSI abnormality
		Detail	An error occurred in SCSI communication with the option printer board.
		Cause	SCSI LSI abnormality ISU PWB abnormality SCSI connector improper connection
		Check and remedy	Replace the printer PWB. Check the SCSI connector. Replace the ISU PWB.

Trouble code		Description	
Main code	Sub code		
F9	90	Content	Printer communication trouble (PRT detection)
		Detail	Communication setup error/framing/parity/protocol error
		Cause	Slave unit PWB connector improper connection Slave unit PWB – ICU PWB harness trouble Slave unit PWB mother board connector pin breakage
		Check and remedy	Check the slave unit PWB and the ICU PWB connector connection. Check the copier earth.
H2	00...HL1 01...HL2	Content	Thermister open Fusing unit not installed
		Detail	Thermister is open (more than 4.6-V input voltage is detected). Fusing unit not installed
		Cause	Thermister defective Control PWB defective Improper connection of fusing connector AC power supply defective Fusing unit not installed
		Check and remedy	Check harness and connector between thermister and control PWB. Clear the display of self-diagnostics with SIM14.
H3	00...HL1 01...HL2	Content	Heat roller high temperature detection
		Detail	The fusing temperature is over 241.5°C (less than 1.3-V input voltage is detected.)
		Cause	Thermister defective Control PWB defective Improper connection of fusing unit connector AC power supply defective
		Check and remedy	Check heater lamp operation with SIM5-2. If lamp blinks properly: Check thermister and its harness. Check thermister input circuit of control PWB. If lamp lights and stays lit: Check lamp control circuits of AC PWB and control PWB. Clear the trouble with SIM14.

Trouble code		Description	
Main code	Sub code		
H4	00...HL1 01...HL2	Content	Heat roller low temperature detection
		Detail	The temperature does not reach the preset value within the specified time (3 min. in usual modes; 5 min. in curl correction mode.) after the power relay is turned on.
		Cause	Thermister defective Heater lamp defective Control PWB defective Thermostat defective AC power supply defective Interlock switch defective
		Check and remedy	Check heater lamp for blinking with SIM5-2. If lamp blinks properly: Check thermister and its harness. Check thermister input circuit of control PWB. If lamp does not light: Check heater lamp for broken wire and thermostat for operation. Check interlock switch. Check lamp control circuit of AC PWB and control PWB. Clear the trouble with SIM14.
H5	01	Content	3 continuous POD1 not-reaching JAM detection
		Detail	3 continuous POD1 not-reaching JAM detection
		Cause	Check that the fusing JAM is completely cancelled. (Jam paper may be remained.) POD1 sensor trouble or improper harness connection Improper installation of the fusing harness.
		Check and remedy	Check JAM paper in the fusing section. (Winding, etc.) Check POD1 sensor harness. Check the fusing unit installation. Cancel the trouble with SIM 14.
	02	Content	Fusing thermistor abnormality
		Detail	Fusing thermistor temperature transient abnormality (Paper winding)
		Cause	Paper winding to fusing roller Fusing pawl abnormality Fusing unit installation abnormality
		Check and remedy	Check for jam (winding) paper in the fusing section. Check for installation of the fusing unit. Check the fusing pawl. Cancel the trouble with SIM 14.
L1	00	Content	Scanner feed trouble
		Detail	Scanner feed is not finished within the specified time. (timer is change by magnification)
		Cause	Mirror unit defective Scanner wire disconnected
		Check and remedy	Check scanning operation with SIM1-1.

Trouble code		Description	
Main code	Sub code		
L3	00	Content	Scanner return trouble
		Detail	Scanner return is not finished within the specified time. (timer is change by magnification)
		Cause	Mirror unit defective Scanner wire disconnected
		Check and remedy	Check scanning operation with SIM1-1.
L4	01	Content	Main motor lock detection
		Detail	Motor lock signal is detected for 1.5 seconds during main motor rotation
		Cause	Main motor defective Improper connection of harness between PCU PWB and main motor Control circuit defective
		Check and remedy	Check main motor operation with SIM25-1. Check harness and connector between PCU PWB and main motor.
L6	10	Content	Polygon motor lock detection
		Detail	It was judged that there is no output of polygon motor lock signal of LSU. The lock signal was checked at about 10-second intervals after the polygon motor started rotating. As result, it was judged that the polygon motor failed to operate normally.
		Cause	Disconnected connector to LSU or detached harness inside LSU or broken wire. Polygon motor defective
		Check and remedy	Check polygon motor operation with SIM61-1. Check harness and connector for connection. Replace LSU if needed.
L8	01	Content	No full-wave signal
		Detail	Full-wave signal is not detected.
		Cause	PCU PWB trouble Power unit trouble
		Check and remedy	Check connection of the harness and the connector. Replace the PCU PWB. Replace the power unit.
	02	Content	Full-wave signal with abnormality
		Detail	Full-wave signal frequency abnormality detected. (The detected frequency: 69Hz or above or 42.5Hz or below)
		Cause	Check for disconnection or improper connection of the connector of the PCU PWB and the power PWB harness. PCU PWB trouble Power unit trouble
		Check and remedy	Check connection of the harness and connector. Replace the power unit.

Trouble code		Description	
Main code	Sub code		
U2	00	Content	EEPROM read/write error
		Detail	EEPROM version error. Error in writing into EEPROM.
		Cause	EEPROM defective Uninitialized EEPROM is installed Defective EEPROM access circuit on PCU PWB
		Check and remedy	Check EEPROM for proper set-up To prevent the erasure of counter data and adjustment values, write down the counter data and adjustment values by simulation. (If there is a printer option, execute SIM23-1 and note counter data/adjustment values.) Clear U2 trouble with SIM16. Replace PCU PWB.
	11	Content	Counter check sum error (EEPROM)
		Detail	Checksum error in counter data area
		Cause	EEPROM defective Control circuit hung up due to noise Defective EEPROM access circuit on PCU PWB
		Check and remedy	Check EEPROM for proper set-up To prevent the erasure of counter data and adjustment values, write down the counter data and adjustment values by simulation. (If there is a printer option, execute SIM23-1 and note counter data/adjustment values.) Clear U2 trouble with SIM16. Replace PCU PWB.
U2	12	Content	Adjustment value check sum error (EEPROM)
		Detail	Checksum error in adjustment value data area
		Cause	EEPROM defective Control circuit hung up due to noise. Defective EEPROM access circuit on PCU PWB
		Check and remedy	Check EEPROM for proper set-up To prevent the erasure of counter data and adjustment values, write down the counter data and adjustment values by simulation. (If there is a printer option, execute SIM23-1 and note counter data/adjustment values.) Clear U2 trouble with SIM16. Replace PCU PWB.



Trouble code		Description	
Main code	Sub code		
U4	02	Content	ADU alignment plate operation abnormality
		Detail	The plate won't move from home position more than 1 second after sending the command to leave home position. Or the plate won't return to home position within 5 seconds after sending the command to return to home position.
		Cause	Home position sensor defective Alignment shift motor defective Improper connection of harness between PCU PWB, motor and sensor. Control PWB (PCU) defective Alignment plate driving belt or gear damaged or improperly adjusted
		Check and remedy	Check home position sensor detection with SIM9-2. Check alignment plate operation with SIM9-4. Check connection between PCU, motor and sensor. Remove ADU and check gear and belt for damage.
	03	Content	ADU rear edge plate operation abnormality
		Detail	When the plate is not shifted from the home position for 1 sec or more or when returning to the home position is not detected for 5 sec or more.
		Cause	Home position sensor defect Rear edge plate shift motor defect Control PWB (PCU) defect Rear edge plate operation belt/gear damage or adjustment error
		Check and remedy	Check the home position sensor operation with SIM 9-21. Check the rear edge plate operation with SIM 9-31. Check between the PCU PWB, the motor, and the sensor. Remove the ADU and check the gear and the belt.
	00	Content	RADF/SPF/RSPF communication trouble
		Detail	Communication line test error occurs when power is turned on or after the exit of a simulation mode. Improper communication with RADF
		Cause	Improper connection or broken wire of connector or harness RADF control PWB defective Control PWB (PCU) defective Malfunction due to noise
		Check and remedy	Check communication line connector and harness. Clear the trouble by turning power supply On/Off.
	01	Content	RADF resist sensor trouble
		Detail	RADF resist sensor detection trouble
		Cause	Sensor defective Improper connection of sensor harness inside RADF. RADF control PWB defective
		Check and remedy	Check resist sensor detection with SIM2-2. Check sensor harness inside RADF.

Trouble code		Description	
Main code	Sub code		
U5	02	Content	RADF eject/inversion sensor trouble
		Detail	RADF eject/inversion sensor detection trouble
		Cause	Defective sensor Improper connection of sensor harness inside RADF. RADF control PWB defective
		Check and remedy	Check eject/inversion sensor detection with SIM2-2. Check sensor harness inside RADF.
	03	Content	RADF timing sensor trouble
		Detail	RADF timing sensor detection trouble
		Cause	Defective sensor Improper connection of sensor harness inside RADF RADF control PWB defective
		Check and remedy	Check timing sensor detection with SIM2-2. Check sensor harness inside RADF.
	06	Content	RSPF post-separation sensor trouble
		Detail	RSPF post-separation sensor detection trouble (in auto adjustment).
		Cause	Sensor trouble. Bad connection of sensor harness in RSPF. RSPF control PWB trouble. Erroneous detection by paper dust.
		Check and remedy	Check detection of post-separation sensor with SIM2-2. Check RSPF sensor harness. Clean and remove paper dust.
	07	Content	RSPF read sensor trouble
		Detail	RSPF read sensor detection trouble (in auto adjustment)
		Cause	Sensor trouble. Bad connection of sensor harness in RSPF. RSPF control PWB trouble. Erroneous detection by paper dust.
		Check and remedy	Check detection of read sensor with SIM2-2. Check RSPF sensor harness. Clean and remove paper dust.
	08	Content	RSPF SB sensor trouble
		Detail	RSPF SB sensor detection trouble (in auto adjustment)
		Cause	Sensor trouble. Bad connection of sensor harness in RSPF. RSPF control PWB trouble. Erroneous detection by paper dust.
		Check and remedy	Check detection of SB sensor with SIM2-2. Check RSPF sensor harness. Clean and remove paper dust.
	11	Content	RADF paper feed motor operation abnormality
		Detail	Paper feed motor driving error
		Cause	Motor lock Improper motor speed Overcurrent to motor RADF control PWB defective
		Check and remedy	Check paper feed motor operation with SIM2-3,4.

Trouble code		Description	
Main code	Sub code		
U5	16	Content	RSPF fan motor operation abnormality
		Detail	An abnormality is detected by the input of RSPF fan motor alarm signal.
		Cause	Motor lock. RSPF control PWB trouble. Bad connection of RSPF motor harness.
		Check and remedy	Check the fan motor operation with SIM2-2.
U6	00	Content	Desk communication trouble
		Detail	Failed communication with desk Communication line test error occurs when power is turned on or after the exit of a simulation mode.
		Cause	Improper connection or broken wire of connector or harness Desk control PWB defective Control PWB (PCU) defective Malfunction due to noise.
		Check and remedy	Clear the trouble by turning the power supply On/Off. Check communication line connector and harness.
	01 – 03	Content	Desk 1, 2, 3 CS lift-up trouble
		Detail	Desk cassette lift-up trouble (1st - 3rd cassettes).
		Cause	Defective sensor RADF control PWB defective Broken gear Lift-up motor defective
		Check and remedy	Check lift-up sensor detection with SIM4-2. Check lift-up motor with SIM4-3.
	08	Content	Desk 24-V power abnormality
		Detail	No supply of DC24V to desk
		Cause	Improper connection or broken wire of connector or harness Desk control PWB defective Power supply unit defective
		Check and remedy	Check power supply line connector and harness. Check 24-V voltage on power supply unit and desk control PWB.
	09	Content	LCC lift motor trouble
		Detail	LCC lift motor trouble
		Cause	Sensor trouble LCC control PWB trouble Gear breakage Lift motor trouble
		Check and remedy	Check the sensor detection with SIM 4-2. Check the lift motor operation with SIM 4-3.
	10	Content	Desk transport motor trouble
		Detail	Desk transport motor operation trouble
		Cause	Motor lock Improper motor speed Overcurrent to motor RADF control PWB defective
		Check and remedy	Check transport motor operation with SIM4-6.

Trouble code		Description	
Main code	Sub code		
U6	20	Content	LCC communication trouble
		Detail	LCC communication trouble Error when power is turned on or in communication line test after exiting SIM.
		Cause	Connector harness improper connection or disconnection LCC control PWB trouble Control PWB (PCU) trouble Malfunction by noise
		Check and remedy	Canceled by turning on the power. Check the connector and harness of the communication line.
	21	Content	LCC transport motor trouble
		Detail	LCC transport motor operation trouble
		Cause	Motor lock Motor rpm abnormality Motor overcurrent LCC control PWB trouble
		Check and remedy	Check the transport motor operation with SIM 4-3.
	22	Content	LCC 24V power abnormality
		Detail	DC24V not supplied to LCC
		Cause	Connector harness improper connection or disconnection LCC control PWB trouble Power unit trouble
		Check and remedy	Check the connector and harness of power line. Check 24V power in the power unit and the LCC control PWB.
	50	Content	Non-support trouble in automatic detection of option connection (Desk unit)
		Detail	In automatic detection of option connection, a non-support desk unit is detected.
		Cause	A non-support desk unit is connected to the copier.
		Check and remedy	Check the desk unit.
	51	Content	Non-support trouble in automatic detection of option connection (LCC unit)
		Detail	In automatic detection of option connection, a non-support LCC unit is detected.
		Cause	A non-support LCC unit is connected to the copier.
		Check and remedy	Check the LCC unit.
U7	00	Content	RIC communication trouble
		Detail	Communication error with RIC Error in communication line test after turning on the power or exiting from SIM.
		Cause	Improper connection or disconnection of connector and harness RIC control PWB trouble Control PWB (ICU) trouble Malfunction caused by noises
		Check and remedy	Turn off/on the power to cancel the trouble.

Trouble code		Description	
Main code	Sub code		
U9	00	Content	Operation control communication trouble (ICU detection)
		Detail	Communication setup error, framing/parity/protocol error
		Cause	Slave unit PWB connector improper connection Slave unit PWB – ICU PWB harness trouble Connector pin breakage of the motor PWB of the slave unit PWB Slave unit ROM trouble. no ROM, ROM reverse insertion, ROM pin breakage
		Check and remedy	Connect the connector of the slave unit PWB and the ICU PWB. Check the connection and the harness. Check the grounding of the copier. Check the ROM of the slave unit PWB.
	90	Content	Operation control communication trouble (OPE detection)
		Detail	Communication setup error/framing/parity/protocol error
		Cause	Slave unit PWB connector improper connection Slave unit PWB – ICU PWB harness trouble Slave unit PWB mother board connector pin breakage
		Check and remedy	Check the slave unit PWB and the ICU PWB connector connection. Check the copier earth.
EE	EL	Content	Auto developing adjustment trouble (overtoner)
		Detail	A sample data is less than 0 when auto developing adjustment is executed.
		Cause	Toner density sensor defective Charging voltage or developing voltage improper. Toner density improper Developing unit defective PCU PWB defective
		Check and remedy	Make auto developing adjustment with SIM25-2.
	EU	Content	Auto developing adjustment trouble (undertoner)
		Detail	A sample data is less than 99 when auto developing adjustment is executed.
		Cause	Toner density sensor defective Charging voltage or developing voltage improper Toner density improper Unit defective PCU PWB defective
		Check and remedy	Make auto developing adjustment with SIM25-2.

Trouble code		Description	
Main code	Sub code		
FC	00	Content	ASK/IrDA modulation LSI reset error
		Detail	Though the RESET signal pulse is sent to the ASK/IrDA modulation LSI, the power signal is not turned ON.
		Cause	1) ICU main PWB defect 2) ASK/IrDA modulation LSI/Clock oscillator defect
		Check and remedy	Perform the self diag with SIM 68-01. Replace the ICU main PWB.
	01	Content	ASK/IrDA switch error
		Detail	Though the ASK/IrDA switch command is sent to the ASK/IrDA modulation LSI, the AI signal is not changed.
		Cause	1) ICU main PWB defect 2) ASK/IrDA modulation LSI/Clock oscillator defect
		Check and remedy	Perform the self diag with SIM 68-01. Replace the ICU main PWB.
PF	00	Content	RIC copy inhibition command reception
		Detail	Copy inhibition command received from RIC (host)
		Cause	Judged by the host.
		Check and remedy	Notice to the host
—		Content	Auditor not ready

## [10] OPERATIONAL DESCRIPTION

### Correcting operation in the image forming section (Process correction operation)

#### 1. Outline and purpose

The operations of the image forming section are corrected in order to maintain stable and high-quality print even when changes occur in the temperature, humidity, consumable parts characteristics, engine conditions, or other environmental conditions.

The correction is performed by controlling various parameters related to the image forming section (process) operations.

With the above correction operations, stable print quality is always provided, reducing service calls and service time.

#### 2. Image forming section correction operation (Process correction operation)

The following are items of the image forming section correction operations (process correction operations).

##### a. List

Image forming section correction operations (process correction operations) list

Item No.	Correction operations	Purpose, effect	Execution conditions, operating timing
1	Image density sensor sensitivity correction (Calibration) (Gain adjustment)	Allows the image density sensor to always detect the correct image patch density.	Before process correction operation
2	OPC drum marking sensor sensitivity correction	Allows the OPC drum marking sensor to always detect the OPC drum marking normally.	* 1
3	Developing bias voltage correction	Prevents against density change and background copy.	* 1
4	Laser beam power correction 1	Prevent against a decrease in print density due to OPC drum membrane decrease.	Specified rotating time of the OPC drum: AR-250/280/281/285/286/335/336: Every 20,000 sec AR-405: Every 16,600 AR-501/505: Every 15,000
	Laser beam power correction 2	Outputs the laser beam power corresponding to the main charger grid voltage (to maintain the constant voltage).	Immediately after correction of the main charger grid voltage (* 1)
5	Main charger grid voltage correction 1	Corrects a decrease in the charging voltage due to the OPC drum membrane decrease, maintains the correct density of print and prevent against background copy.	Specified rotating time of the OPC drum: AR-250/280/281/285/286/335/336: Every 20,000 sec AR-405: Every 16,600 AR-501/505: Every 15,000
	Main charger grid voltage correction 2	Maintains the relations between the developing bias voltage and the main charger grid voltage at constant (to prevent against background copy).	Immediately after correction of the developing bias voltage (* 1)
6	Toner concentration correction	Maintains the normal toner concentration to maintain the proper density of print and prevent against background copy.	When the developing bias voltage correction is performed for the voltage higher than the specified level is made immediately after the developing bias voltage correction. (* 1)

- \* 1 During warm-up after turning on the power.  
During warm-up after cancelling SIM 7-1, 24-7, 25-2, 44-2.  
After completion of printing when the accumulated print time reaches 30 min from the previous correction.  
When the next print is made after the unit is idle for one hour.

#### 3. Details

##### A. Operating conditions and timing of the image forming section correction operation (Process correction operation)

The image forming section correction operation (process correction operation) is performed under the following conditions and timing.

- 1) During warm-up after turning on the power.
- 2) During warm-up after cancelling SIM 7-1, 24-7, 25-2, 44-2.
- 3) After completion of printing when the accumulated print time reaches 30 min from the previous correction.
- 4) When the next print is made after the unit is idle for one hour.

## B. Details of operations

### (1) OPC drum marking sensor sensitivity adjustment (Calibration) and marking detection

#### a. Outline and purpose

The sensor sensitivity is adjusted to allow correct detection of the OPC drum marking.

#### b. Details (Calibration)

The sensor LED drive voltage (current) is changed, and when the sensor output voltage reaches the specified level, the sensor LED drive current control value is stored. In actual operations, the sensor LED is driven by the voltage corresponding to the control value and detection is performed.

### (2) Image density sensor sensitivity adjustment (Calibration)

#### a. Outline and purpose

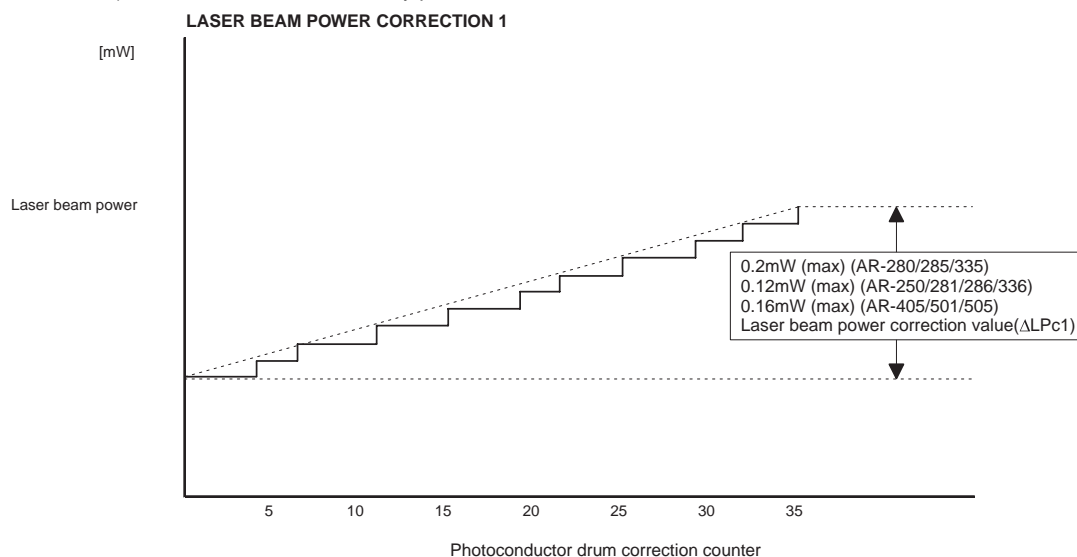
In the developing bias voltage correction, the image sensor sensitivity is adjusted to allow correct detection of the toner image patch density and normal operation of the developing bias voltage correction.

#### b. Details (Calibration)

The sensor LED drive voltage (current) is changed, and when the sensor output voltage reaches the specified level, the sensor LED drive current control value is stored. In actual operations, the sensor LED is driven by the voltage corresponding to the control value and detection is performed.

### (3) Laser beam power correction 1

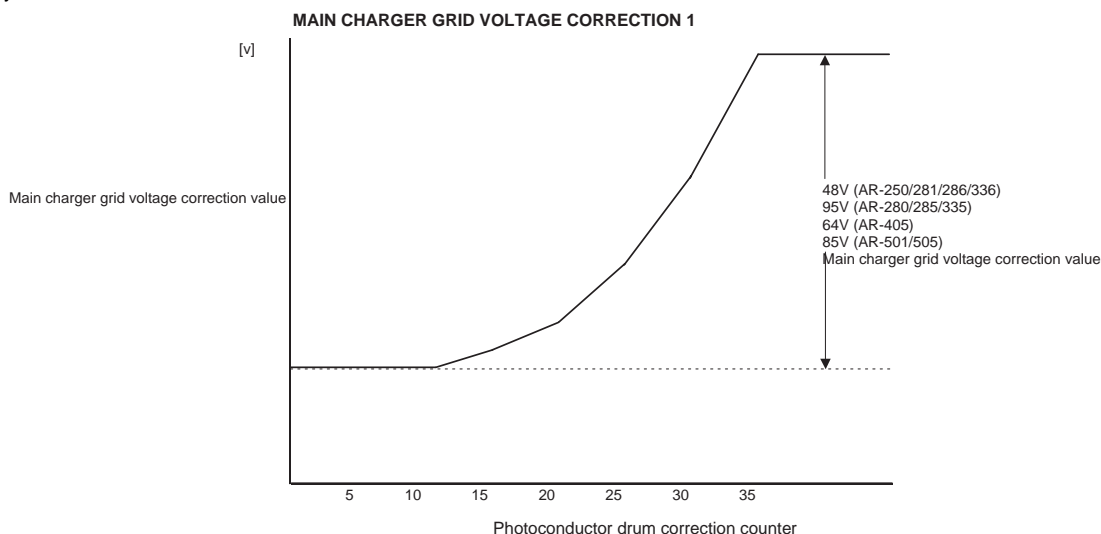
Deterioration of photo sensitivity due to deterioration of OPC drum is corrected by adjusting the laser beam power according to the OPC drum rotating time (operation time) to maintain the correct density print.



1 count: 20,000 sec (Photoconductor drum rotation time) (AR-250/280/281/285/286/335/336)  
 16,600 sec (Photoconductor drum rotation time) (AR-405)  
 15,000 sec (Photoconductor drum rotation time) (AR-501/505)

### (4) Main charger grid voltage correction 1

The main charger grid voltage is increased according to deterioration of the OPC drum to maintain the proper density print and prevent against background copy.



1 count: 20,000 sec (Photoconductor drum rotation time) (AR-250/280/281/285/286/335/336)  
 16,600 sec (Photoconductor drum rotation time) (AR-405)  
 15,000 sec (Photoconductor drum rotation time) (AR-501/505)



## (6) Main charger grid voltage correction 2

### a. Outline and purpose

When the developing bias voltage is changed, the main charger grid voltage correction 2 is performed to maintain the relation between the developing bias voltage and the main charger grid voltage at constant.

### b. Details

After the developing bias voltage correction, the voltage of correction of the developing bias voltage is automatically added to the main charger grid voltage.

Actual main charger grid voltage variable range: -200 to -900V

## (7) Laser beam power correction 2

To maintain the OPC drum bright potential at constant for changes in the main charger grid voltage due to main charger grid voltage correction 1 and 2, the laser beam power must be changed accordingly.

Laser beam power correction 2 is performed to output the laser beam power according to the above situation.

This correction provides stable print density.

## (8) Toner concentration correction A

### a. Outline and purpose

This correction is used to correct changes in the developer characteristics due to aging and change in the environmental conditions.

When any change occurs in the developer characteristics, it causes under-toner or over-toner, resulting in improper print density.

To prevent against this, the reference toner control level is changed according to the conditions to maintain the specified toner concentration.

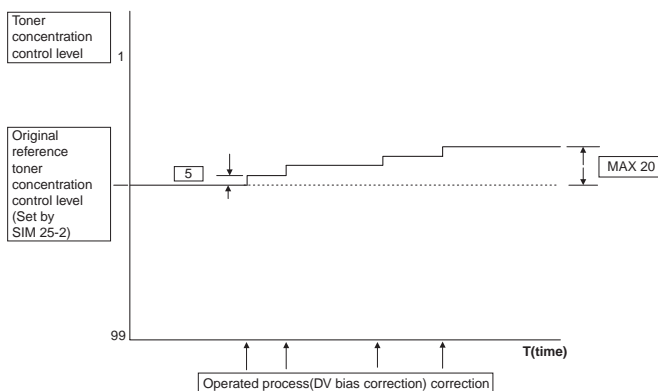
This correction provides stable print density.

### b. Details of operation

When the developing bias correction voltage ( $\Delta V_{dbc}(n)$ ) is minus-corrected (shifted to the positive polarity direction), it is recognized as an increase in developing capability, and the reference toner concentration control level set with SIM 25-2 is increased.

With the above operation, toner concentration is decreased to maintain the proper print density.

The correction data is cleared to "0" when SIM 25-2 is executed.



## (9) Toner concentration correction B

### a. Outline and purpose

Developer shows an inclination of overtoning with age. To prevent against this, the reference toner concentration control level is changed according to the situation to maintain the specified toner concentration level.

### b. Details of operation

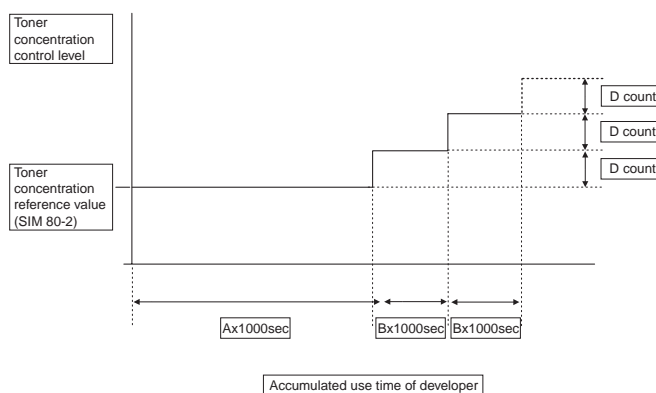
When the developer rotation time (SIM 44-9: DEVE MIXING TIME) reaches  $A \times 1000\text{sec}$ , the reference toner concentration level set with SIM 25-2 is increased by D count.

After that, correction by D count is made for every  $B \times 1000\text{sec}$ , and correction is ended up with C times of the number of times of correction.

The correction quantity can be changed with SIM 25-8. When shipping, correction is not used.

### <Means>

The accumulated use time of developer is detected. When it reaches the specified level, the toner concentration control reference value is corrected (SIM 80-2).



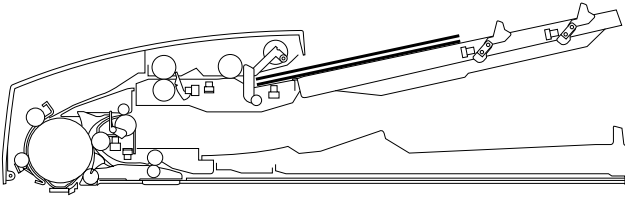
- This correction can be performed with SIM 25-8.
- The accumulated use time of developer is detected and displayed on the menu of SIM 44-9 similarly with the drum counter.
- The accumulated use time of developer is cleared after execution of SIM 25-2, and the counter is reset to 0sec. It, however, is not cleared with SIM 25-1.
- The accumulated use time of developer can be reset with SIM 24-11.
- The current correction quantity of toner concentration reference value is displayed on the menu of SIM 44-9 separately from toner concentration control correction A.
- The first correction time A can be set with a simulation and the default is 200. (Set range: 0 to 500)
- The second or later correction time B can be set with a simulation and the default is 50. (Set range: 0 to 300)
- The number of times of correction, C, can be set with a simulation and the default is 3. (Set range: 0 to 10)
- The correction quantity D can be set with a simulation and the default is 0. (Set range: 0 to 30)

## 4. RSPF

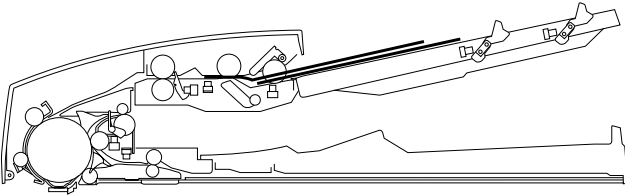
### A. Operational descriptions

#### a. Simplex operation

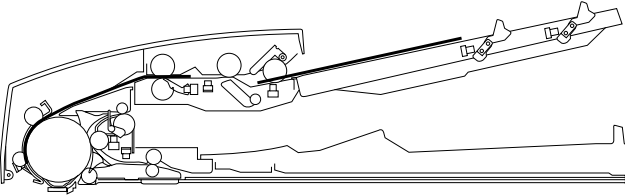
- 1) Document set (2 pages)



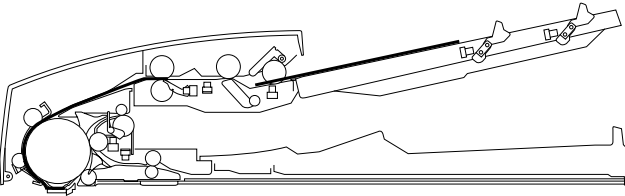
- 2) First page preliminary paper feed start



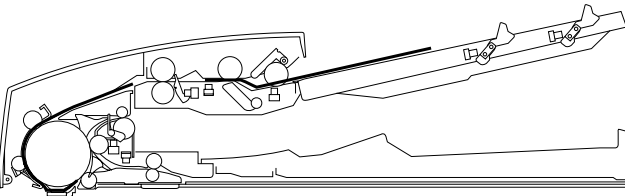
- 3) First page preliminary paper feed end



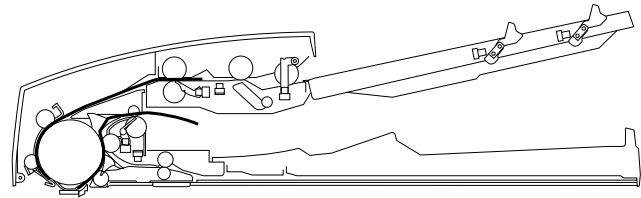
- 4) First page paper feed start



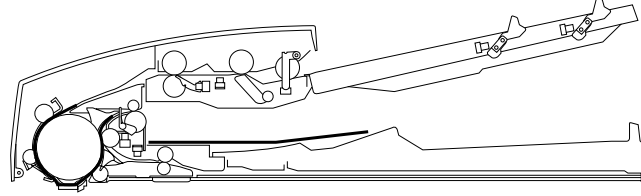
- 5) Second page preliminary paper feed start



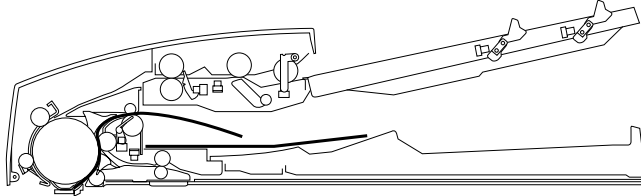
- 6) Second page preliminary paper feed end/First page paper feed end



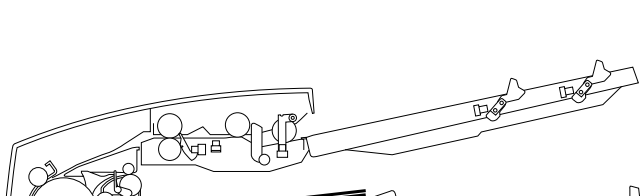
- 7) Second page paper feed start/First page paper exit end



- 8) Second page paper exit start

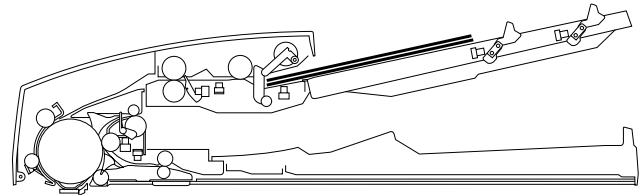


- 9) Second page paper exit end



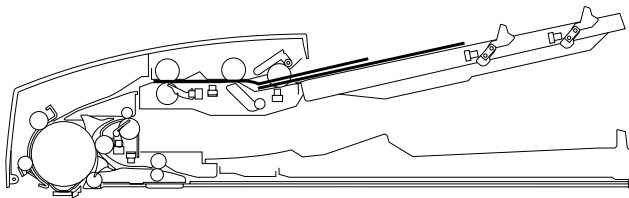
#### b. Duplex operation

- 1) Document set (2 pages)

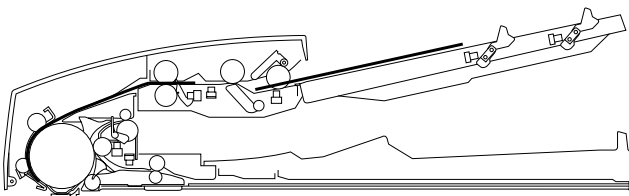




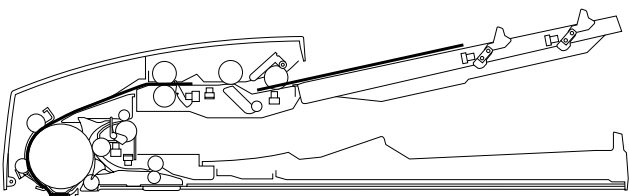
2) First page preliminary paper feed start



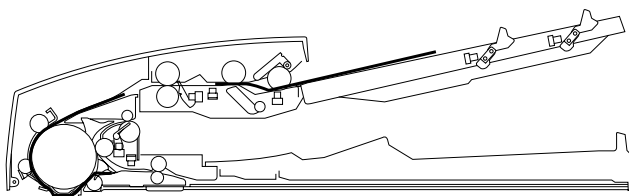
3) First page preliminary paper feed end



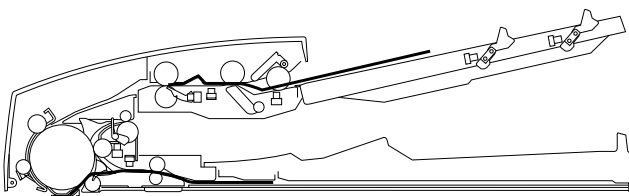
4) First page paper feed start (Front)



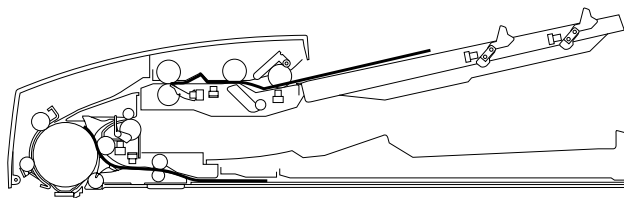
5) Second page preliminary paper feed start



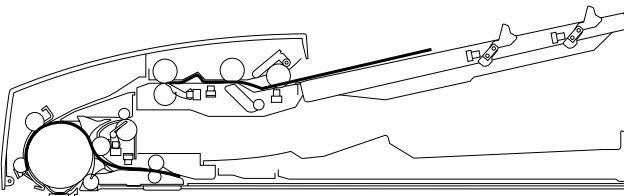
6) First page paper feed end (Front)



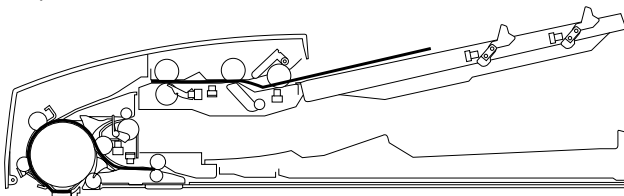
7) First page reverse start



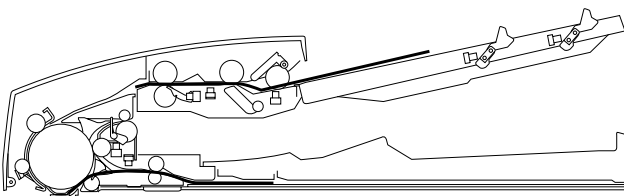
8) First page reverse end



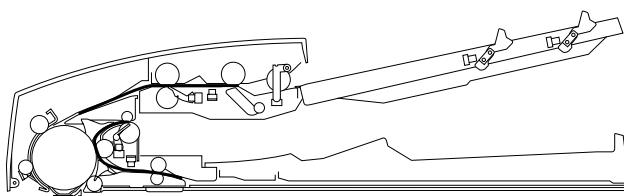
9) First page paper feed start (Back)/Second page preliminary paper feed resume



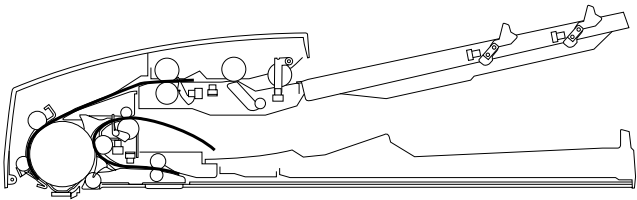
10) First page paper feed end (Back)



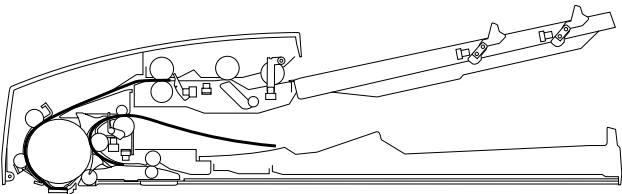
11) Second page preliminary paper feed resume/First page paper exit start



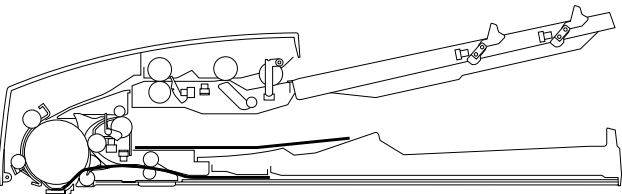
12) Second page preliminary paper feed end



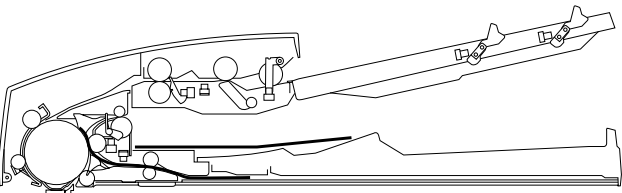
13) Second page paper feed start (Front)



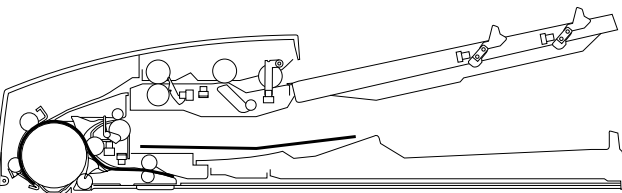
14) Second page paper feed end (Front)



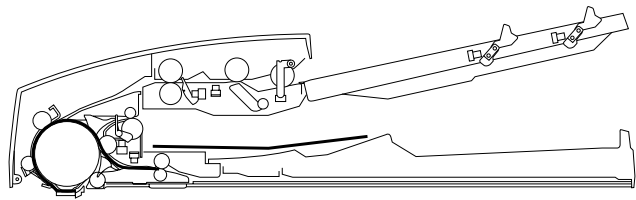
15) Second page reverse start



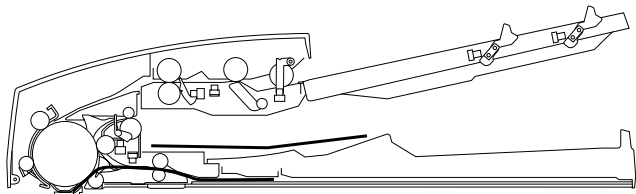
16) Second page reverse end



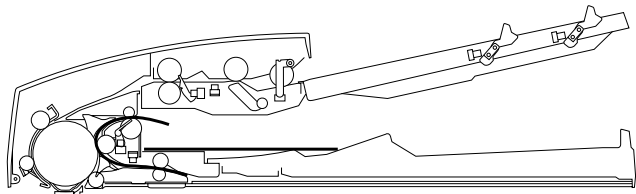
17) Second page paper feed start (Back)



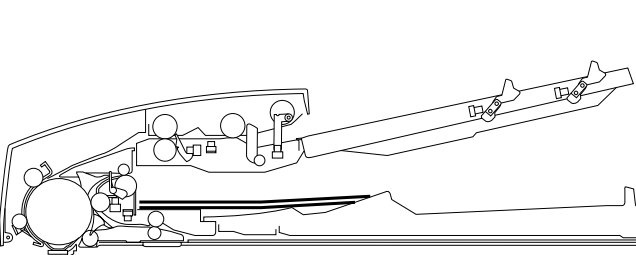
18) Second page paper feed end (Back)



19) Second page paper exit start



20) Second page paper exit end



## B. Document size detection method

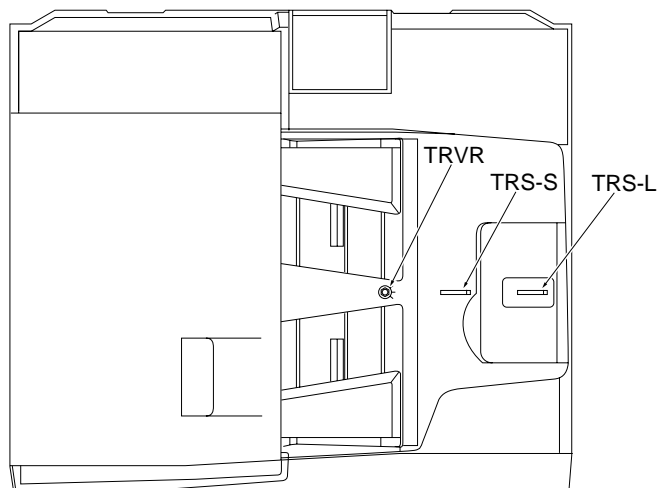
This machine detects document sizes in the following three ways.

### 1) Document size detection by the document set tray

When documents are set in the document set tray, the size is detected to enable the automatic selection of the suitable paper and the copy magnification ratio according to the detected size.

When mixed sizes of documents are set, the max. size is detected. The document width is detected by TRVR (size volume), and the document length by TRS-S and TRS-L (tray sensors) to identify the document size.

The judgement of a document size is made at the timing when the empty sensor (EMPS) detects a document.



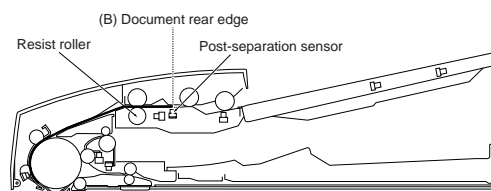
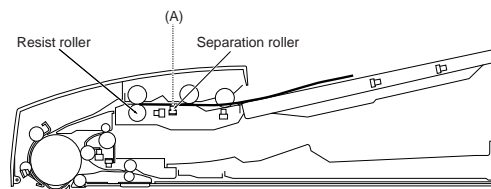
Document sizes and sensor states

	Document size and set direction	Sensor states (Detection level, or ON: $\mu$ , OFF: $\lambda$ )		
		TRVR	TRS-S	TRS-L
INCH-1	B5R	1	$\mu$	$\lambda$
	INV (5.5 $\times$ 8.5)	2	$\lambda$	$\lambda$
	LTR (8.5 $\times$ 11R)	2	$\mu$	$\lambda$
	LGR (8.5 $\times$ 14R)	2	$\mu$	$\mu$
	B5	3	$\lambda$	$\lambda$
	B4R	3	$\mu$	$\mu$
	LT (8.5 $\times$ 11)	4	$\lambda$	$\lambda$
	WLTR (11 $\times$ 17R)	4	$\mu$	$\mu$
	A4	5	$\lambda$	$\lambda$
	A3R	5	$\mu$	$\mu$
INCH-2	B5R	1	$\mu$	$\lambda$
	INV (5.5 $\times$ 8.5)	2	$\lambda$	$\lambda$
	LTR (8.5 $\times$ 11R)	2	$\mu$	$\lambda$
	L4R (8.5 $\times$ 13R)	2	$\mu$	$\mu$
	B5	3	$\lambda$	$\lambda$
	B4R	3	$\mu$	$\mu$
	LT (8.5 $\times$ 11)	4	$\lambda$	$\lambda$
	WLTR (11 $\times$ 17R)	4	$\mu$	$\mu$
	A4	5	$\lambda$	$\lambda$
	A3R	5	$\mu$	$\mu$
SEEG SUK Japan	B5R	1	$\mu$	$\lambda$
	LGR (8.5 $\times$ 14R)	2	$\mu$	$\mu$
	A5	2	$\lambda$	$\lambda$
	A4R	2	$\mu$	$\lambda$
	B5	3	$\lambda$	$\lambda$
	B4R	3	$\mu$	$\mu$
	LT (8.5 $\times$ 11)	4	$\lambda$	$\lambda$
	WLTR (11 $\times$ 17R)	4	$\mu$	$\mu$
	A4	5	$\lambda$	$\lambda$
	A3R	5	$\mu$	$\mu$
SCA	B5R	1	$\mu$	$\lambda$
	F4R (8.5 $\times$ 13R)	2	$\mu$	$\mu$
	A5	2	$\lambda$	$\lambda$
	A4R	2	$\mu$	$\lambda$
	B5	3	$\lambda$	$\lambda$
	B4R	3	$\mu$	$\mu$
	LT (8.5 $\times$ 11)	4	$\lambda$	$\lambda$
	WLTR (11 $\times$ 17R)	4	$\mu$	$\mu$
	A4	5	$\lambda$	$\lambda$
	A3R	5	$\mu$	$\mu$

## 2) Document size detection by the post-separation sensor (SPS)

This detection method supplements an incompleteness of document size detection on the document set tray when documents of different sizes are set together. Therefore, the detection result of this method has priority over that of the document set tray.

The document length is detected by counting the number of pulses of the paper feed motor (AMOT) and the transport motor (FMOT) during the time interval from when the paper feed motor (AMOT) starts rotation, that is, the resist roller starts rotation, and a document is fed from the paper feed section to the paper transport section to when the post-separation sensor (SPS) detects the rear edge of the document. With the detected document length and the document width detected by the size volume (TRVR), the document size is identified.



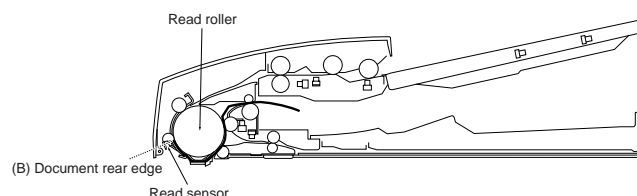
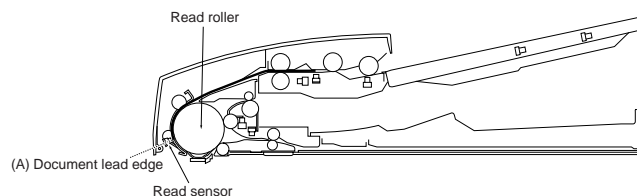
The number of pulses of the paper feed motor (AMOT) and the transport motor (FMOT) during the time interval between (A) and (B) is counted.

## 3) Document size detection by the read sensor (RDS)

This detection method supplements an incompleteness of document size detection on the document set tray when documents of same width but different length are set together (LTR/LGR judgement) or when document of a larger size than LT whose rear edge is not detected by the post-separation sensor (SPS) are set. Therefore, the detection result of this method has priority over that of the document size detection by the post-separation sensor.

When the transport motor (FOMT) rotates in the normal direction, the read roller starts rotation and the document is fed from the paper feed section to the paper transport section. At that time, The number of pulses of the transport motor (FMOT) is counted while the read sensor reads the document from the lead edge to the rear edge, and the document length is detected from the count.

With the detected document length and the document width detected by the size volume (TRVR), the document size is identified.



The number of pulses of the transport motor (FOMT) between (A) and (B).

**CAUTION FOR BATTERY REPLACEMENT**

(Danish)

**ADVARSEL !**

Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.  
Udskiftning må kun ske med batteri  
af samme fabrikat og type.  
Levér det brugte batteri tilbage til leverandoren.

(English)

**Caution !**

Danger of explosion if battery is incorrectly replaced.  
Replace only with the same or equivalent type  
recommended by the manufacturer.

Dispose of used batteries according to manufacturer's instructions.

(Finnish)

**VAROITUS**

Paristo voi räjähtää, jos se on virheellisesti asennettu.  
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan  
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden  
mukaisesti.

(French)

**ATTENTION**

Il y a danger d'explosion s' il y a remplacement incorrect  
de la batterie. Remplacer uniquement avec une batterie du  
même type ou d'un type équivalent recommandé par  
le constructeur.

Mettre au rebut les batteries usagées conformément aux  
instructions du fabricant.

(Swedish)

**VARNING**

Explosionsfara vid felaktigt batteribyte.  
Använd samma batterityp eller en ekvivalent  
typ som rekommenderas av apparattillverkaren.  
Kassera använt batteri enligt fabrikantens  
instruktion.

# AR-287/337

## MODEL AR-407/507

### CONTENTS

1 Exteriors(Front cabinet etc.)	40 PCU PWB(AR-287,337,407)
2 Exteriors(Rear,Left side cabinet etc.)	41 PCU PWB(AR-507)
3 Operation panel unit	43 ICU PWB(AR-287,337,407)
5 Optical unit 1	44 ICU PWB(AR-507)
6 Optical unit 2	46 Operation control PWB
9 Frame section	53 DC Power supply PWB(100V series)
10 Rear frame 1 (PCU PWB,DC power PWB etc.)	54 DC Power supply PWB200Vseries (and 100V series AR-287,337)
11 Rear frame 1(AC PWB,Frame etc)	63 RSPF 2(AR-507)
12 Rear frame 2	64 RSPF 3(AR-507)
16 Fusing unit 1	65 RSPF 4(AR-507)
17 Fusing unit 2	66 RSPF 5(AR-507)
39 Packing material & Accessories	■ Index

This Parts Guide describes only the Different points from and added points to the AR-505 Parts Guide(00ZAR505//P1E).

Those which are not described in this manual are common with the AR-505 Parts Guide. Please refer to the AR-505 Parts Guide for them, Parts with a blank column of model name are common to all the models.

## DEFINITION

The definition of each Rank is as follows and also noted in the list

A : Parts necessary to be stocked as High usage parts.

B : Parts necessary to be stocked as Standard usage parts.

C : Low usage parts.

D : Parts necessary for refurbish.

E : Unit parts recommended to be stocked for efficient after sales service.

Please note that the lead time for the said parts may be longer than normal parts.

S : Consumable parts.

Please note that the following parts used in Copier under the same description are classified into A or B Rank depending upon the place used.

Example: Gear made of Metal, Sprocket, Bearing, Belt made of Rubber, Spring clutch mechanism.

A Rank : The parts which may be with the revolution or loading.

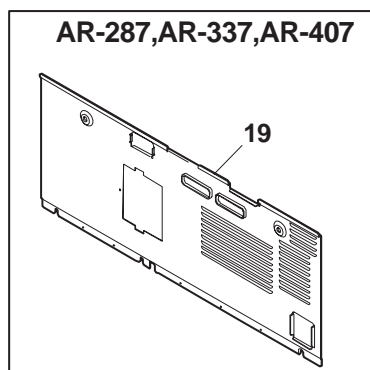
B Rank : Parts similar to A Rank parts, but are not included in Rank A.

Because parts marked with "△" is indispensable for the machine safety maintenance and operation, it must be replaced with the parts specific to the product specification.

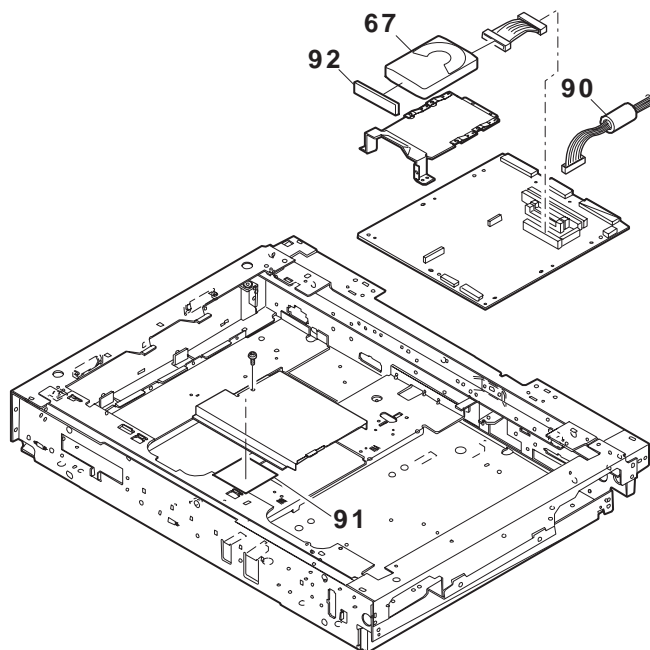
- Other than this Parts Guide, please refer to documents Service Manual (including Circuit Diagram) of this model.
- Please use the 13 digit code described in the right hand corner of front cover of the document, when you place an order.
- For U.S. only-Use order codes provided in advertising literature. Do not order from parts department.

New model	Compared models
AR-287	AR-285
AR-337	AR-335
AR-407	AR-405
AR-507	AR-505

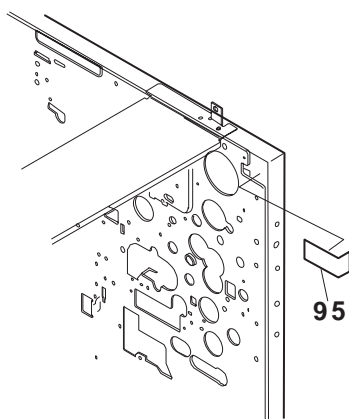
**2** Exteriors(Rear,Left side cabinet etc.)



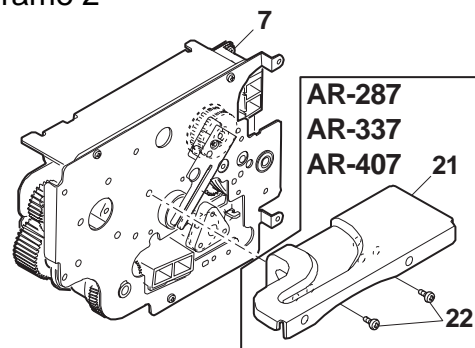
**5** Optical unit 1



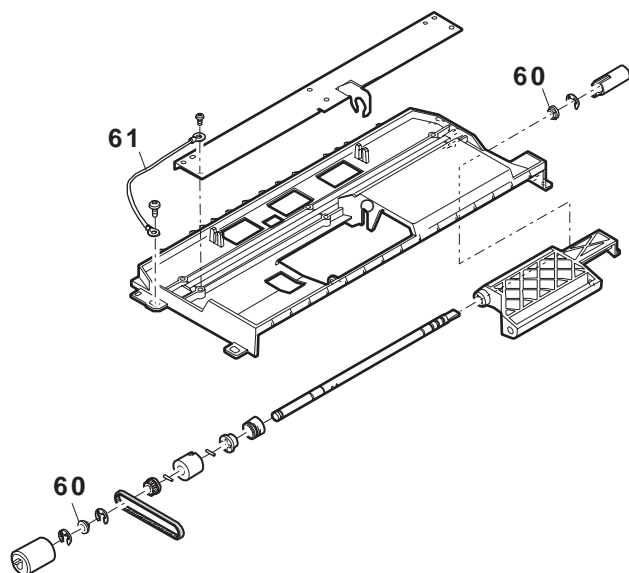
**9** Frame section



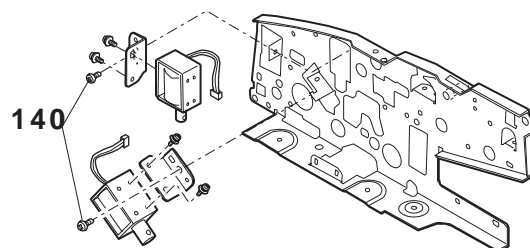
**12** Rear frame 2



**65** RSPF 4(AR-507)



**66** RSPF 5(AR-507)



FCPN0033

# 1 Exteriors(Front cabinet etc.)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
10	CCAB-0888FC63	BD	N	E	Front exterior unit (USA only)[AR-287]
	CCAB-0888FC62	BD	N	E	Front exterior unit (Except USA)[AR-287]
	CCAB-0888FC65	BD	N	E	Front exterior unit (USA only)[AR-337]
	CCAB-0888FC64	BD	N	E	Front exterior unit (Except USA)[AR-337]
	CCAB-0927FC42	BB	N	E	Front exterior unit (USA only)[AR-407]
	CCAB-0927FC41	BB	N	E	Front exterior unit (Except USA)[AR-407]
	CCAB-0927FC45	BB	N	E	Front exterior unit (USA only)[AR-507]
	CCAB-0927FC44	BB	N	E	Front exterior unit (Except USA)[AR-507]

# 2 Exteriors(Rear,Left side cabinet etc.)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
19	G CAB-0933FCZZ	AW	N	D	Rear exterior [AR-287,337,407]

# 3 Operation panel unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
2	CPWBN1442FC31	BY	N	E	Operation control PWB [AR-287,337,407]
8	PSHEP4812FCZZ	AR	N	C	LCD sheet [AR-287,337,407,507]
9	HPNLH0238FCZ1	BF		D	Touch panel [except AR-405]
27	PSHEZ4819FCZZ	AH	N	C	Panel sheet (English) [AR-287,337]
	PSHEZ4819FCZ1	AH	N	C	Panel sheet (German) (Germany)[AR-287,337]
	PSHEZ4819FCZ2	AH	N	C	Panel sheet (French) (Canada,Morocco)[AR-287,337]
	PSHEZ4819FCZ3	AH	N	C	Panel sheet (English) (LAG3,LAG4)[AR-287,337]
	PSHEP4818FCZZ	AH	N	C	Panel sheet (English) (Canada,Germany)[AR-507]
	PSHEP4818FCZ1	AH	N	C	Panel sheet (German) (Germany only)[AR-507]
	PSHEP4818FCZ2	AE	N	C	Panel sheet (French) (Canada,Morocco)[AR-507]
	PSHEP4818FCZ3	AE	N	C	Panel sheet (English) (LAG2,LAG3,LAG4)[AR-507]
28	HPNLC0241FCZZ	AX		D	Operation panel [AR-407,507]
33	CPNLC0242FC03	AU		D	Operation panel B (USA only)[AR-407]
	CPNLC0242FC06	AT		D	Operation panel B [AR-507]
37	PSHEP4816FCZ2	AE	N	C	Panel sheet B (French) (Canada,Morocco ) [AR-287,337,]
	PSHEP4816FCZ2	AE	N	C	Panel sheet B (English) (Canada,Germany)[AR-287,337,]
	PSHEP4816FCZ1	AE	N	C	Panel sheet B (German) (Germany only)[AR-287,337,]
	PSHEP4816FCZ3	AE	N	C	Panel sheet B (English) (LAG3,LAG4)[287,337]
	PSHEP4817FCZZ	AE	N	C	Panel sheet B (English) (Canada)[AR-407]
	PSHEP4817FCZ1	AE	N	C	Panel sheet B (German) (Germany)[AR-407]
	PSHEP4817FCZ2	AE	N	C	Panel sheet B (French) (Canada ) [AR-407]
	PSHEP4817FCZ3	AE	N	D	Panel sheet B for Key (LAG2)[AR-407]

# 5 Optical unit 1

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
4	PCOVP1454FCZ1	AN		C	Dark box cover B [AR-287,337,407,507]
10	PCOVP1518FCZZ	AE		D	ICU ROM cover [AR-237,337,407,507]
31	DHAi-3133FCZZ	AT	N	C	LSU interface harness N [AR-287,337]
	DHAi-3134FCZZ	AS	N	C	LSU interface harness N [AR-407]
53	CPWBN1439FC51	DB	N	E	ICU PWB (AR-287)
	CPWMN1438FC51	DB	N	E	ICU PWB (AR-337)
	CPWBN1438FC52	DB	N	E	ICU PWB (AR-407)
	CPWBN1437FC53	CZ	N	E	ICU PWB (AR-507)
67	DUNT-7051FCZZ	CC	N	E	Hard disk [AR-287,337,407]
84	RCORF5010BCZZ	AD		C	Ferrite core (AR-287,337,407,507)
85	RCORF6693RCZZ	AK		C	Ferrite core (AR-287,337,407,507)
90	RCORF0030FCZZ	AM		C	Ferrite core (AR-287,337,407,507)
91	PCUSS0371FCZZ	AE	N	C	LSU harness fixing sheet
92	PCUSS0369FCZZ	AF		C	Cushion

# 6 Optical unit 2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
33	CPLTM5435FC02	AN		C	Optical frame reinforce plate
45	LPLTM5430FCZ1	AN		C	OC fixing plate [except AR-507]



## 9 Frame section

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
2	DUNT-6984FC23	CT	N	E	LSU unit [AR-287,337]
	DUNT-6984FC24	CT	N	E	LSU unit [AR-407]
	DUNT-6984FC31	CU	N	E	LSU unit [AR-507]
51	NFANP0048FCZZ	AY		B	Fan (60X20P) (USA,Canada)[AR-287,337]
	NFANP0060FCZZ	AX		B	Fan (60X25μ) (except USA Canada)[AR-287,337]
79	CPWBN1418FC52	BQ	N	E	LSU control PWB [AR-407]
95	PSHEP4851FCZZ	AB	N	C	Manual hranness fixing sheet

## 10 Rear frame 1(PCU PWB,DC power PWB etc.)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
32	CPLTM5401FC02	AY		C	Board support plata (100Vseries)[except AR-507]
	CPLTM5400FC01	AP		C	Board support plate (except USA Canada)(200Vseries)[AR-287,337,407]
44	DHAi-3070FCZZ	BY		C	Main harness (USA Canada)(100V series)[AR-287,387,407]
	DHAi-3090FCZZ	AP		C	Main harness (excpt USA Canada)(200V series)[AR-287,337,407]
49	LPLTM5666FCZZ	AG		C	SCSI I/F plate [AR-287,337,408,507]
50	LPLTM5666FCZ1	AF		C	SCSI I/F plate [AR-287,337,407,507]

## 11 Rear frame 1(AC PWB,Frame etc)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
14	LPLTM5398FCZ2	AR		C	AC PWB fixing plate (100V series)
15	LSUPP0060FCZZ	AA		C	PWB supporter(SPLS-6) (USA Canada)
24	QACCR7421QCZZ	AY		C	AC cprd (250V series)[LAG4]
	QPLGA0005QCZZ	AN	N	B	AC cord plag (Hong Kong only)
25	DHAi-2904FC12	AM	N	C	Earth core (Taiwan)

## 12 Rear frame 2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
10	NFLY-0010FCZZ	AN		C	Flay wheel
21	LDAIU0615FCZZ	AG	N	C	SCSI fixing plate [except AR-507]
22	XHBSE40P08000	AA		C	Screw [except AR-507]

## 16 Fusing unit 1

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
901	DUNTW6931FC44	CC	N	E	Fusing unit (100V series)(AR-287,337)
	DUNTW6931FC45	CC	N	E	Fusing unit (200V series)(AR-287,337)
	DUNTW6931FC24	CC	N	E	Fusing unit (100V series)(AR-407)
	DUNTW6931FC25	CC	N	E	Fusing unit (200V series)(AR-407)
	DUNTW6931FC23	CC	N	E	Fusing unit (100V series)Taiwan(AR-407)

## 17 Fusing unit 2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
23	CFRM-0953FC02	AS	N	C	Fusing lower frame (AR-287,337)
901	DUNTW6931FC44	CC	N	E	Fusing unit (100V series)(AR-287,337)
	DUNTW6931FC45	CC	N	E	Fusing unit (200V series)(AR-287,337)
	DUNTW6931FC24	CC	N	E	Fusing unit (100V series)(AR-407)
	DUNTW6931FC25	CC	N	E	Fusing unit (200V series)(AR-407)
	DUNTW6931FC23	CC	N	E	Fusing unit (100V series)Taiwan(AR-407)

## 39 Packing material &amp; Accessories

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	SPAKC6081FC11	BC	N	D	Packing case (USA only)[AR-287]
	SPAKC6082FCZZ	BC	N	D	Packing case (Germany , Europe except Germany ) [AR-287]
	SPAKC6081FCZZ	BC	N	D	Packing case (Other countries)[AR-287]
	SPAKC6081FC13	BC	N	D	Packing case (USA only)[AR-337]
	SPAKC6082FC11	BC	N	D	Packing case (For Europe except Germany)[AR-337]
	SPAKC6081FC12	BC	N	D	Packing case (Other countries)[AR-337]
	SPAKC6081FC15	BC	N	D	Packing case (USA only)[AR-407]
	SPAKC6082FC12	BC	N	D	Packing case (Germany For Europe except Germany)[AR-407]
	SPAKC6081FC14	BC	N	D	Packing case (Other countries)[AR-407]
	SPAKC6083FC12	BD	N	D	Packing case (for USA)[AR-507]
	SPAKC6084FCZZ	BD	N	D	Packing case (Germany for Europe except Germany)[AR-507]
2	SPAKC6083FC11	BD	N	D	Packing case (for other countries)[AR-507]
	SPAKA5895FCZZ	AX	N	D	Top packing cushion L ADF (AR-287)[Hong Kong]
	SPAKA5962FCZ1	AW	N	D	Top packing cushion L ADF (AR-407)[Hong Kong]
	SPAKA5896FCZZ	AT	N	D	Top packing cushion R ADF (AR-287)[Hong Kong]
7	SPAKA5963FCZ1	AW	N	D	Top packing cushion R ADF (AR-407)[Hong Kong]
	CPAKA5760FC32	BE	N	D	Skid unit [Hong Kong]
12	SPAKA6074FCZZ	AG	N	D	ADF protect sheet [Hong Kong]
36	TCADZ2001QCZA	AE		D	Card (Australia, New Zealand)
	TCADS0649FCZZ	AM		D	Card (Germany, Europe)
37	CINSE1951FC51	BB	N	D	Operation manual for copy (English)(except USA,U.Kingdom)[AR-287,337]
	CINSF1952FC51	BE	N	D	Operation manual for copy (Fench)[AR-287,337,407]
	CINSS1955FC51	BE	N	D	Operation manual for copy (Spanish)[AR-287,337,407]
	CINSG1953FC51	BE	N	D	Operation manual for copy (German)[AR-287,337,407]
	CINSR1959FC51	BE	N	D	Operation manual for copy (Russian)[AR-287,337,407]
	CINSZ1960FC51	BE	N	D	Operation manual for copy (Arabic)[AR-287,337,407]
	CINSE1949FC51	AZ	N	D	Operation manual for copy (English)(USA only)[AR-287,337,407]
	CINSE1954FC51	BB	N	D	Operation manual for copy (English) (U.Kingdom)[AR-407]
	CINSE1977FC51	AZ	N	D	Operation manual for copy (English) (USA)[AR-507]
	CINSE1979FC51	BA	N	D	Operation manual for copy (English) (except USA,U.Kingdom)[AR-507]
	CINSR1987FC51	BE	N	D	Operation manual for copy (Russian)[AR-507]
	CINSS1983FC51	BE	N	D	Operation manual for copy (Spanish)[AR-507]
	CINSZ1988FC51	BE	N	D	Operation manual for copy (Arabic)[AR-507]
	CINSF1980FC51	BE	N	D	Operation manual for copy (French) (Canada)[AR-507]
	CINSE1982FC51	BB	N	D	Operation manual for copy (English) (U.Kingdom)[AR-507]
39	CINSG1981FC51	BE	N	D	Operation manual for copy (Germany) (Germany)[AR-507]
	CINSE1978FC51	AQ	N	D	Operation manual for Key (USA only)[AR-507]
41	CINSE1950FC51	AP	N	D	Operation manual for Key (USA only)[AR-407]
	PSHEZ4819FCZZ	AH	N	C	Panel sheet (English) [AR-287,337]
	PSHEZ4819FCZ1	AH	N	C	Panel sheet (German) (Germany)[AR-287,337]
	PSHEZ4819FCZ2	AH	N	C	Panel sheet (French) (Canada,Morocco)[AR-287,337]
	PSHEZ4819FCZ3	AH	N	C	Panel sheet (English) (LAG3,LAG4)[AR-287,337]
	PSHEP4818FCZZ	AE	N	C	Panel sheet (English) (Canada,Germany)[AR-507]
	PSHEP4818FCZ1	AE	N	C	Panel sheet (German) (Germany only)[AR-507]
	PSHEP4818FCZ2	AE	N	C	Panel sheet (French) (Canada only)[AR-507]
	PSHEP4818FCZ3	AE	N	C	Panel sheet B (English) (LAG3,LAG4)[AR-507]
	PSHEP4816FCZ2	AE	N	C	Panel sheet B (French) (Canada,Morocco ) [AR-287,337]
	PSHEP4816FCZZ	AE	N	C	Panel sheet B (English) (Canada,Germany)[AR-287,337]
	PSHEP4816FCZ1	AE	N	C	Panel sheet B (German) (Germany only)[AR-287,337]
	PSHEP4816FCZ3	AE	N	C	Panel sheet B (English) (LAG3,LAG4)[AR-287,337]
	PSHEP4817FCZZ	AE	N	C	Panel sheet B (English) (Canada)[AR-407]
	PSHEP4817FCZ1	AE	N	C	Panel sheet B (German) (Germany)[AR-407]
	PSHEP4817FCZ2	AE	N	C	Panel sheet B (French) (Canada ) [AR-407]
	PSHEP4817FCZ3	AE	N	D	Operation manual for Key (LAG2)[AR-407]
42	TCADZ0098QSZZ	AF		D	Warranty resist card (U.Kingdom only)
	TGANE1001QCZB	AC		D	Warranty resist card (Australia,New Zealand)
43	TCADZ1442FCZZ	AE		D	MSDS card (USA,Canada,U.Kingdom)[AR-280,281,286,336]
50	TLABH4411FCZZ	AE		D	Operation card (U.Kingdom)(AR-507)
51	TLABH4410FCZZ	AK		C	Card (U.Kingdom)
52	TLABH4259FCZZ	AH		C	Sheet (Hong kong)

## 40 PCU PWB(AR-287,337,407)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	VHi28F161A20C	BE	N	B	PCUFLASH PWB(28F161A20C) (100V series)[AR-287,337]
	VHi28F161A21C	BE	N	B	PCUFLASH PWB(28F161A21C) (200V seeies)[AR-287,337]
	VHi28F161A23C	BE	N	B	PCUFLASH PWB(28F161A23C) (100V series)[AR-407]
	VHi28F161A24C	BE	N	B	PCUFLASH PWB(28F161A24C) (200V series)[AR-407]
11	QSOCZ0073FCZZ	AL		C	Socket(DMM2SD72A1131) [SOCKET1]
42	VHiIS61C51215	AU		B	IC (IS61C51215) [IC25,28,30,35]
54	VHiHD74LV32AF	AD		B	IC (HD74LV32AF) [IC36]
101	VSDTC114EK/-1	AB		B	Transistor(DTC114EK) [Q206,207]
901	CPWBN1440FC31	BY	N	E	PCU PWBwithout FLASH PWB

## 41 PCU PWB(AR-507)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	VH i 28F161A26C	BE	N	B	PCUFLASH PWB(28F161A26C) (100V series)
	VH i 28F161A27C	BE	N	B	PCUFLASH PWB(28F161A27C) (200V series)
37	VHERD222FB/-1	AD		B	Zener diode(RD22FB) [ZD2,3,7,8]
40	VH i i S61C51215	AU		B	IC (IS61C512-15J) (IS61C512-15J) [IC26,28,30,34]
45	VH i MM74HC138S	AE	N	B	IC (MM74HC138SJ) [IC19]
46	VH i MM74HC151S	AE	N	B	IC (MM74HC151SJ) [IC13~16,21~24]
53	VH i 74VHCT04-1	AF		B	IC (74VHCT04) [IC40,41]
54	VH i HD74LV32AFP	AD		B	IC (HD74LV32AFP) [IC42]
105	VSDTC114EK/-1	AB		B	Transistor (DTC114EK) [Q204,205]
106	VRS-RE3LA201J	AC	N	B	Resistor (3W 200Ω±5%) [R16]
107	VRS-RE3LA241J	AC	N	B	Resistor (3W 240Ω±5%) [R15]
901	CPWBN1441FC31	BY	N	E	PCU PWB(without FLASH PWB)

## 43 ICU PWB(AR-287,337,407)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LX-NZ0032FCZZ	AA		C	Nut (P3035B)
2	PCOVW0829FCZZ	AC		D	Battery cover
3	PSPAZ1413FCZZ	AC		C	Spacer (PSM2-01)
4	QCNCM0972FCZZ	AH		C	Connector (26pin) [CN2]
5	QCNCM0974FCZZ	AK		C	Connector (RKH401TD019) [CN6]
6	QCNCM0990FCZZ	AE		C	Connector (10pin) [CN5]
7	QCNCM0991FCZZ	AG		C	Connector (30FMZ-BT) [CN3]
8	QCNCM0998FCZZ	AF		C	Connector (22pin) [CN1]
9	QCNCM1015FCZZ	AG		C	Connector (28pin) [CN7]
10	QCNCW1020FCZZ	AF		C	Connector (22pin) [CN10]
11	QCNCW1046FCZZ	AK		C	Connector (DHB-RA50-R1)(SCSI) [CN11,CN12]
12	QSOCZ0073FCZZ	AL		C	Connector (72pin) [SOCKET1,2]
13	QSOCZ6428ACZZ	AE		C	IC socket (28pin) [IC22p]
14	RC-KZ1054CCN2	AB		C	Capacitor (RPE132-906) [C13,15,19,21,22,26,27]
15	RCILF0080FCZZ	AC		C	Coil (BLM21B601SP) [L101]
16	RCRS-0049FCZZ	AP		B	Crystal (SG8002JC 29MHz) [except AR-407][X4]
	RCRS-0050FCZZ	AP		B	Crystal (8002JC 34.2MHz) [AR-407][X4]
17	RCRS-0051FCZZ	AP		B	Crystal (SG8002JC 32MHz) [except AR-407][X1]
	RCRS-0052FCZZ	AP		B	Crystal (8002JC 37.9MHz) [AR-407][X1]
18	RCRS-0055FCZZ	AP		B	Crystal (8002JC 40MHz) [X6]
19	RCRS-0056FCZZ	AP		B	Crystal (8002JC 50MHz) [X5]
20	RCRS-0065FCZZ	AP	N	B	Crystal (8002JC 38.893MHZ) [except AR-407][X2]
	RCRS-0064FCZZ	AP	N	B	Crystal (8002JC 46.9MHZ) [AR-407][X2]
21	RCRSP6676RCZZ	AG		B	Crystal (32.768KHz) [X7]
22	RFiLN6012RCZZ	AB		C	EMI filter (E103) [NF76~81]
23	RFiLN6013RCZZ	AB		C	EMI filter (EXCEMT222BT) [NF65~75,82~84]
24	RFiLZ0028FCZZ	AD		C	EMI filter (NFM40) [NF1~7,9~28]
25	RFiLZ0032FCZZ	AD		C	EMI filter (NFM40220) [NF29~64]
26	RMPTC4220QCJJ	AC		B	Block resistor (22Ω×4) [BR24,25,26,27,28,29,30,31,32]
	RMPTC4220QCJJ	AC		B	Block resistor (22Ω×4) [BR33,34,35,36,37,38,39,40,41]
	RMPTC4220QCJJ	AC		B	Block resistor (22Ω×4) [BR42,43]
27	RMPTM0034FCZZ	AC		B	Block resistor (10KΩ×8) [BR1~15]
28	UBATL2033SCZZ	AK		B	Battery (CR2032-H03) [BT1]
29	VCCCTV1HH300J	AA		C	Capacitor (50WV 30PF) [C141,142]
30	VCCCTV1HH6R0D	AA		C	Capacitor (50WV 6.0PF) [C235,236]
31	VCEA2U0JW108M	AD		C	Capacitor (6.3WV 1000μF) [C6]
32	VCEA2U1CW477M	AD		C	Capacitor (16WV 470μF) [C33]
33	VCEA2U1VW227M	AD		C	Capacitor (35WV 220μF) [C4,5]
34	VCEAJU0JW107M	AB		C	Capacitor (6.3WV 100μF) [C9]
35	VCEAJU0JW226M	AB		C	Capacitor (6.3WV 22μF) [C7,12]
36	VCEAJU0JW337M	AC		C	Capacitor (6.3WV 330μF) [C8,28,30,39,40]
37	VCEAJU1HW105M	AB		C	Capacitor (50WV 1.0μF) [C31]
38	VCEAJU1HW335M	AB		C	Capacitor (50WV 3.3μF) [C29,32]
39	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C122,133,187,195,213]
40	VCKYTV1HF103Z	AA		C	Capacitor (50WV 0.010μF) [C199]
41	VCKYTV1HF104Z	AA		C	Capacitor (50WV 0.10μF) [C101,103,106,116,119,124,152]
	VCKYTV1HF104Z	AA		C	Capacitor (50WV 0.10μF) [C153,154,165,168,171,180,189]
	VCKYTV1HF104Z	AA		C	Capacitor (50WV 0.10μF) [C200,201,223,234,238,261,262]
	VCKYTV1HF104Z	AA		C	Capacitor (50WV 0.10μF) [C263,264,265,266,267,268,270]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C102,104,105,107,108,109,110]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C111,112,113,114,115,117,118]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C120,121,123,125,126,127,128]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C129,130,131,132,134,135,136]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C137,138,139,140,144,145,146]
42	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C147,148,149,150,156,157,158]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C159,160,161,162,163,164,166]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C167,172,176,177,178,179,181]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C185,186,188,190,191,192,193]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C194,196,197,198,202,203,204]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C205,206,207,208,209,210,211]

## 43 ICU PWB(AR-287,337,407)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
42	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C212,214,215,216,217,218,219]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C220,222,224,225,226,227,228]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C229,230,231,233,237,240,241]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C271,274,275,276,277,278]
43	VHDDAN217/-1	AC		B	Diode (DAN217) [D102]
44	VHDDAP202K/-1	AB		B	Diode (DAP202K) [D101]
45	VHDDSS133HV-1	AA		B	Diode (DSS133HV) [D1~5]
46	VHDBR160L40-1	AD		B	Diode (RB160L40) [D105,106]
47	VHDBR411D/-1	AD		B	Diode (RB411D) [D103,104]
48	VHEHZS5A1/-1	AC		B	Zener diode (HZS5A1) [ZD2]
49	VHEHZS6A1/-1	AC		B	Zener diode (HZS6A1) [ZD1]
50	VHi74AC04SJX/	AE	N	B	IC (74AC04SJX/) [IC105,112]
51	VHi74AC08SJX/	AE	N	B	IC (74AC08SJX/) [IC106,116]
52	VHi74ACT08SCX	AE	N	B	IC (74ACT08SCX) [IC14]
53	VHi74ACT32SCX	AD	N	B	IC (74ACT32SCX) [IC11,36]
54	VHi74VHCT08AJ	AD	N	B	IC (74VHCT08AJ) [IC4]
55	VHi74VHCT240X	AF	N	B	IC (74VHCT240X) [IC103,107,109,110,115]
56	VHi74VHCT244X	AF	N	B	IC (74VHCT244X) [IC108,117,118]
57	VHi74VHCT245X	AF	N	B	IC (74VHCT245X) [IC113,114]
58	VHiAT28C64B-1	AZ		B	EEP ROM (AT28C64B) [IC22]
59	VHiD65806GL-1	BK		B	IC (D65806GL) [IC31]
60	VHiD65808GL-1	BM		B	IC (D65808GL) [IC20]
61	VHiD65948GL-1	BH		B	IC (D65948GL062) [IC19]
62	VHiD82165GC-1	BE		B	IC (D82165GC) [IC15]
63	VHiD82355GN-1	BS		B	IC (D82355GN) [IC13]
64	VHiD82356GN-1	BS		B	IC (D82356GN) [IC23]
65	VHiDM74ALS574	AK	N	B	IC (DM74ALS574) [IC6]
66	VHiDM74AS04JX	AF	N	B	IC (DM74AS04JX) [IC102]
67	VHiDM74AS157M	AL	N	B	IC (DM74AS157M) [IC5,104]
68	VHiDM74AS74MX	AG	N	B	IC (DM74AS74MX) [IC101,119]
69	VHiDS90C401-1	AU		B	IC (DS90C401) [IC7]
70	VHiIS61C25612	AN		B	IC (IS61C25612) [IC1,2,3,18]
71	VHiLH537C0G-1	BC		B	IC (LH537C0G) [IC26]
72	VHiLM339NS/-1	AD		B	IC (LM339NS) [IC111]
73	VHiLZ9AT36/-1	BB		B	IC (LZ9AT36) [IC32]
74	VHiM66235FP-1	AT		B	IC (M66235FP) [IC8]
75	VHiMB86604L-1	BC		B	IC (MB86604L) [IC33,34]
76	VHiMCF5202P25	BG		B	IC (MCF5202P25) [IC21]
77	VHiNJU6356E-1	AK		B	IC (NJU6356E) [IC35]
78	VHiS61C102415	AV	N	B	IC (S61C102415) [IC27,28,29,30]
79	VHiSD6416-100	BG		B	IC (SDRAM) [IC120,121,122,123]
80	VHiTD62503F/-	AG		B	IC (TD62503) [IC9]
81	VHiXLI2050X-1	BQ		B	IC (XLI2050X) [IC16]
82	VHPMVR3864K-J	AC		B	LED (MVR3864K) [LD1]
83	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R101,102,103,104,105,106,107]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R108,109,112,113,114,115,116]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R117,118,122,126,130,131,136]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R141,157,196,200,201,202,205]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R206,212,213,343,344,349,351]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R358,359,510,514,515,535,537]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R353,354,355]
84	VRS-TS2AD101J	AA		C	Resistor (1/10W 100Ω ±5%) [except AR-407][R197,552]
85	VRS-TS2AD102J	AA		C	Resistor (1/10W 1.0KΩ ±5%) [R123,110]
86	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R111,139,193]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R120,137,143,145,146,161,162]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R163,164,165,171,176,177,179]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R182,191,194,195,207,208,209]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R214,215,216,241,242,243,245]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R246,247,472,538,539,540,541]
87	VRS-TS2AD105J	AA		C	Resistor (1/10W 10KΩ ±5%) [R542,543,544,545,546,547,548]
88	VRS-TS2AD1105J	AA		C	Resistor (1/10W 1MΩ ±5%) [R134]
88	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [R127,183]
	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [AR-407][R551]
89	VRS-TS2AD151J	AA		C	Resistor (1/10W 150Ω ±5%) [R189]
90	VRS-TS2AD200J	AA		C	Resistor (1/10W 20Ω ±5%) [R119]
91	VRS-TS2AD220J	AA		C	Resistor (1/10W 22Ω ±5%) [R477,478,479,480,481,482,483]
	VRS-TS2AD220J	AA		C	Resistor (1/10W 22Ω ±5%) [R484,485,486,487,488,489,490]
	VRS-TS2AD220J	AA		C	Resistor (1/10W 22Ω ±5%) [R491,492,516,517,518,519,520]
	VRS-TS2AD220J	AA		C	Resistor (1/10W 22Ω ±5%) [R522,523,160]
92	VRS-TS2AD221J	AA		C	Resistor (1/10W 220Ω ±5%) [R135]
93	VRS-TS2AD222J	AA		C	Resistor (1/10W 2.2KΩ ±5%) [R169,178]
94	VRS-TS2AD223J	AA		C	Resistor (1/10W 22KΩ ±5%) [R181,345,346,347,348]
95	VRS-TS2AD224J	AA		C	Resistor (1/10W 220KΩ ±5%) [R184]
96	VRS-TS2AD301J	AA		C	Resistor (1/10W 300Ω ±5%) [R170,190]
97	VRS-TS2AD331J	AA		C	Resistor (1/10W 330Ω ±5%) [R356]
98	VRS-TS2AD363J	AA		C	Resistor (1/10W 36KΩ ±5%) [R185]
99	VRS-TS2AD391J	AA		C	Resistor (1/10W 390Ω ±5%) [R203]
100	VRS-TS2AD393J	AA		C	Resistor (1/10W 39KΩ ±5%) [R180]
101	VRS-TS2AD472J	AA		C	Resistor (1/10W 4.7KΩ ±5%) [R240,244,525,526,527,528,529]
	VRS-TS2AD472J	AA		C	Resistor (1/10W 4.7KΩ ±5%) [R530,531,532,533]



## 53 DC Power supply PWB(100V series)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0 F T 2 3 0 0 6 2 1 2 //	AP		B	IC (MB3759M) [Z1]
2	0 F T 2 3 0 0 7 5 2 9 //	AF	N	B	Zener diode RD3.9E-B2 [D768]
3	0 F T 2 3 0 3 4 1 3 5 //	AC		C	Screw (3×8)(AP43421-051-04)
4	0 F T 2 3 0 5 5 1 5 9 //	AD		B	Transistor (2SC1815-Y) [Q729]
5	0 F T 2 3 0 7 8 3 6 1 //	AH		B	Transistor (2SA1020) [Q705,Q726]
6	0 F T 2 3 0 7 8 8 7 6 //	AH		B	Diode (RK44) [D719]
7	0 F T 2 3 0 8 0 9 8 6 //	AG		B	Transistor (2SC1815) [Q701,Q711,Q724]
8	0 F T 2 3 0 8 8 4 2 1 //	AK		C	Chemical capacitor (KME10VB-2200) [C802,C803,C804,C814]
9	0 F T 2 3 1 0 5 4 2 3 //	AE		C	Connector (RT-01N-2.3A) [TB701,TB702]
10	0 F T 2 3 1 0 7 0 0 0 //	AC	N	B	Diode 1S2076 [D756]
11	0 F T 2 3 1 3 8 4 2 9 //	AK		B	Diode (RL2ZP) [D725]
12	0 F T 2 3 1 4 4 9 2 5 //	AD	N	C	Film capacitor (MMT-224J50) [C710]
13	0 F T 2 3 1 4 9 3 6 6 //	AH		B	Transistor (2SC2655-Y) [Q706,Q725]
14	0 F T 2 3 1 5 0 5 2 6 //	AN		C	Chemical capacitor (KME35VB-1000) [C757,C791]
15	0 F T 2 3 1 6 5 1 7 5 //	AH		C	Chemical capacitor (KME35VB-470) [C764]
16	0 F T 2 3 1 8 8 6 5 5 //	AP		C	Chemical capacitor (KME25VB-2200) [C754]
17	0 F T 2 3 1 8 8 6 6 3 //	AH		C	Chemical capacitor (KME25VB-470) [C796]
18	0 F T 2 3 1 8 8 7 2 8 //	AP		C	Chemical capacitor (KME35VB-2200) [C760,C761]
19	0 F T 2 3 1 9 5 2 3 6 //	AC		B	Diode (1SS119-14) [D2,D723,D751,D753,D761,D764,D766,D773,D779]
20	0 F T 2 3 1 9 8 6 3 4 //	AF		B	Zener diode (RD6.8ES-B3) [D767]
21	0 F T 2 3 2 2 3 1 1 6 //	AF		B	Zener diode (RD13ES-B2) [D757]
22	0 F T 2 3 2 3 9 8 3 7 //	AK		C	Chemical capacitor (KME35VB-100FC) [C713,C725,C779]
23	0 F T 2 3 2 4 6 1 9 1 //	AF		B	Zener diode (RD5.6ES-B2) [D765]
24	0 F T 2 3 2 4 6 2 0 5 //	AF		B	Zener diode (RD6.2ES-B2) [D709]
25	0 F T 2 3 2 5 9 1 9 6 //	AK	N	C	Chemical capacitor (KME10VB-470FC) [C806]
26	0 F T 2 3 2 5 9 2 4 2 //	AF		C	Chemical capacitor (KME25VB-220FC) [C822]
27	0 F T 2 3 2 5 9 2 6 9 //	AF		C	Chemical capacitor (KME50VB-1FC) [C805]
28	0 F T 2 3 2 5 9 2 8 5 //	AF		C	Chemical capacitor (KME50VB-10FC) [C6]
29	0 F T 2 3 2 5 9 3 0 7 //	AH		C	Chemical capacitor (KME63VB-100) [C731]
30	0 F T 2 3 2 6 2 4 6 4 //	AU		C	Chemical capacitor (KME35VB-3300) [C769]
31	0 F T 2 3 2 6 5 4 2 0 //	AE		B	Zener diode (RD24ES-B2) [D749,D750]
32	0 F T 2 3 2 8 5 7 5 8 //	AK		B	Diode (RG2A) [D708]
33	0 F T 2 3 2 8 7 8 1 5 //	AF		C	Chemical capacitor (KME50VB-22FC) [C1]
34	0 F T 2 3 2 8 8 1 5 3 //	AE		B	Zener diode (RD27ES-B2) [D752]
35	0 F T 2 3 2 9 1 2 3 5 //	AE		B	Zener diode (RD12ES-B3) [D706,D776]
36	0 F T 2 3 2 9 2 7 6 2 //	AL		C	Chemical capacitor (KME50VB-330) [C790]
37	0 F T 2 3 3 0 5 5 8 9 //	AK	N	C	Chemical capacitor (KME10VB-100FD) [C808]
38	0 F T 2 3 3 3 0 6 0 5 //	AF	N	B	Zener diode (RD18ES-B2) [D712]
39	0 F T 2 3 3 3 9 8 2 3 //	AK	N	C	Plate (AP47101-009-05)
40	0 F T 2 3 3 5 7 0 5 //	AF		B	Zener diode (RD6.8ES-B2) [D724]
41	0 F T 2 3 3 7 1 1 5 8 //	AK		C	Cement resistor (BPR26 2W 0.01ΩK) [R815,R816]
42	0 F T 2 3 3 8 2 0 6 0 //	AN	N	C	Film capacitor (MMT-105J50) [C813]
43	0 F T 2 3 3 8 2 0 7 9 //	AG		C	Film capacitor (MMT-224J50) [C719,C756,C809]
44	0 F T 2 3 3 9 7 8 5 8 //	AK	N	C	Connector (B2P3-VH) [CN701]
45	0 F T 2 3 4 0 0 4 3 3 //	AF		B	Zener diode (RD3.6ES-B2) [D763]
46	0 F T 2 3 4 0 5 0 8 7 //	AN		B	Transistor (2SC3852A) [Q707]
47	0 F T 2 3 4 1 2 6 4 4 //	AH		C	Ceramic capacitor (RPE132CH391J50) [C721]
48	0 F T 2 3 4 1 3 4 0 3 //	AU		B	Rectifier (ESAD92M-03) [RC703,RC705]
49	0 F T 2 3 4 1 8 2 0 0 //	AC	N	C	Carbon resistor (RDMF14-FX3.9ΩJ) [R817]
50	0 F T 2 3 4 1 8 2 3 5 //	AC		C	Carbon resistor (RDMF14-FX 6.8ΩJ) [R819]
51	0 F T 2 3 4 1 8 3 8 3 //	AC		C	Carbon resistor (RDMF14-FX 100ΩJ) [R731,R803,R804,R844,R850,R872,R890]
52	0 F T 2 3 4 1 8 4 2 1 //	AC		C	Carbon resistor (RDMF14-FX 220ΩJ) [R841]
53	0 F T 2 3 4 1 8 5 1 0 //	AC		C	Carbon resistor (RDMF14-FX 1KΩJ) [R708,R717,R732,R759,R779,R783,R820,R821,R834,R862]
54	0 F T 2 3 4 1 8 5 2 9 //	AC		C	Carbon resistor (RDMF14-FX 1.2KΩJ) [R782]
55	0 F T 2 3 4 1 8 5 3 7 //	AC		C	Carbon resistor (RDMF14-FX 1.5KΩJ) [R874]
56	0 F T 2 3 4 1 8 5 4 5 //	AC		C	Carbon resistor (RDMF14-FX 1.8KΩJ) [R851]
57	0 F T 2 3 4 1 8 5 5 3 //	AC		C	Carbon resistor (RDMF14-FX 2.2KΩJ) [R7,R9,R707,R709,R739,R758,R760]
58	0 F T 2 3 4 1 8 5 8 8 //	AC		C	Carbon resistor (RDMF14-FX 3.3KΩJ) [R4,R761]
59	0 F T 2 3 4 1 8 5 9 6 //	AC		C	Carbon resistor (RDMF14-FX 3.9KΩJ) [R780]
60	0 F T 2 3 4 1 8 6 1 8 //	AC		C	Carbon resistor (RDMF14-FX 4.7KΩJ) [R827,R829,R870]
61	0 F T 2 3 4 1 8 6 2 6 //	AC		C	Carbon resistor (RDMF14-FX 5.1KΩJ) [R733]
62	0 F T 2 3 4 1 8 6 3 4 //	AC		C	Carbon resistor (RDMF14-FX 5.6KΩJ) [R3]
63	0 F T 2 3 4 1 8 6 6 9 //	AC		C	Carbon resistor (RDMF14-FX 0ΩJ) [R706,R778,R781,R831,R859,R873,R902]
64	0 F T 2 3 4 1 8 6 8 5 //	AC		C	Carbon resistor (RDMF14-FX 12KΩJ) [R2]
65	0 F T 2 3 4 1 8 6 9 3 //	AC		C	Carbon resistor (RDMF14-FX 15KΩJ) [R826]
66	0 F T 2 3 4 1 8 7 1 5 //	AC	N	C	Carbon resistor (RDMF14-FX22KΩJ) [R738]
67	0 F T 2 3 4 1 8 8 0 4 //	AC		C	Carbon resistor (RDMF14-FX 100KΩJ) [R762,R777]
68	0 F T 2 3 4 1 8 8 2 0 //	AC		C	Carbon resistor (RDMF14-FX 180KΩJ) [R843]
69	0 F T 2 3 4 1 9 0 0 2 //	AC	N	C	Carbon resistor (RDMF14-FX 150KΩJ) [R722]
70	0 F T 2 3 4 1 9 0 1 0 //	AC		C	Carbon resistor (RDMF14-FX 1MΩJ) [R6]
71	0 F T 2 3 4 1 9 4 0 1 //	AC		C	Carbon resistor (RDF14-FB 1KΩJ) [R1,R5]
72	0 F T 2 3 4 1 9 4 5 2 //	AC		C	Carbon resistor (RDF14-FB 2.2KΩJ) [R8]
73	0 F T 2 3 4 1 9 5 8 4 //	AC	N	C	Carbon resistor (RDF14-FB15KΩJ) [R730]
74	0 F T 2 3 4 2 3 8 1 6 //	AC		C	Screw (3×8) [.]
75	0 F T 2 3 4 2 9 7 8 4 //	AU		B	Rectifier (ESAD92M02) [RC704]
76	0 F T 2 3 4 5 3 8 4 7 //	AC		C	Screw (3×12)
77	0 F T 2 3 4 5 5 7 5 0 //	AF	N	C	Screw (3×14)
78	0 F T 2 3 4 7 6 8 2 0 //	AK		C	Cement resistor (BPR56 5W 0.1ΩJ) [R728,R729]
79	0 F T 2 3 4 8 3 4 2 8 //	AF		B	Zener diode (RD2.0ES-B2) [D777]

## 53 DC Power supply PWB(100V series)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
80	0 F T 2 3 4 8 6 1 9 2 //	AH	N	C	Film capacitor (MMT-474J50) [C778]
81	0 F T 2 3 5 1 6 2 6 1 //	AD		C	Metal film resistor (RSMF12B 10ΩJ) [R737]
82	0 F T 2 3 5 3 7 0 8 0 //	AD		C	Metal film resistor (RSMF12B 2.2ΩJ) [R770,R828]
83	0 F T 2 3 5 3 7 1 2 9 //	AD		C	Metal film resistor (RSMF12B 15ΩJ) [R861]
84	0 F T 2 3 5 3 7 1 3 7 //	AD		C	Metal film resistor (RSMF12B 22ΩJ) [R734,R735,R736]
85	0 F T 2 3 5 3 7 2 2 6 //	AD		C	Metal film resistor (RSMF12B 330 OHMJ) [R721]
86	0 F T 2 3 5 3 9 4 2 3 //	AK		C	Connector (MDF14A-8P-2.5DS) [PN1]
87	0 F T 2 3 5 5 4 0 2 //	AD		A	Fuse holder (EYF-52LCZ) [F701*,F703*,F705*,F706*,F707*,F708*,F709*]
88	0 F T 2 3 5 6 2 2 9 8 //	AD	N	C	Metal film resistor (RSMF2SL 1KΩJ) [R757]
89	0 F T 2 3 5 6 2 3 3 6 //	AD	N	C	Metal film resistor (RSMF12SL 10ΩJ) [R835]
90	0 F T 2 3 5 6 2 3 7 9 //	AD	N	C	Metal film resistor (RSMF12SL 1ΩJ) [R903]
91	0 F T 2 3 5 6 2 7 9 4 //	AD	N	C	Metal film resistor (RSMF1SL 1 OHMJ) [R744]
92	0 F T 2 3 5 6 2 8 1 6 //	AC	N	C	Metal film resistor (RSMF1SL2.2 OHMJ) [R718]
93	0 F T 2 3 5 6 2 8 5 9 //	AD	N	C	Metal film resistor (RSMF1SL 10Ωj) [R788]
94	0 F T 2 3 5 6 2 8 7 5 //	AD	N	C	Metal film resistor (RSMF2SL 22ΩJ) [R753,R755]
95	0 F T 2 3 5 6 3 0 7 3 //	AC	N	C	Metal film resistor (RSMF1SL22K OHMJ) [R702,R723]
96	0 F T 2 3 5 6 3 2 7 8 //	AC	N	C	Metal film resistor (RSMF2SL 15 OHMJ) [R719,R720]
97	0 F T 2 3 5 6 3 2 8 6 //	AC		C	Metal film resistor (RSMF2SL 22ΩJ) [R751,R752]
98	0 F T 2 3 5 6 3 3 1 6 //	AC		C	Metal film resistor (RSMF2SL 68ΩJ) [R727]
99	0 F T 2 3 5 6 3 4 5 6 //	AC	N	C	Metal film resistor (RSMF2SL10K OHMJ) [R703,R704]
100	0 F T 2 3 5 6 3 8 7 1 //	AF	N	C	Metal film resistor (RSMF3SL 47K OHMJ) [R724,R725,R726]
101	0 F T 2 3 5 9 3 2 8 2 //	AH		C	Ceramic capacitor (DE506-63R102K250) [C784,C785,C792,C793]
102	0 F T 2 3 6 0 1 5 5 2 //	AF		B	Diode (1GU42) [D711,D713]
103	0 F T 2 3 6 0 6 7 3 2 //	AD		B	Diode (S5688G) [D701,D702,D703,D704,D705,D707,D710,D722,D732,D735,D780]
104	0 F T 2 3 6 1 1 3 2 9 //	AK		C	Film capacitor (MMC-104K400) [C723,C811,C812]
105	0 F T 2 3 6 2 1 9 4 4 //	AC	N	C	Metal film resistor (RSMF2SL 150K OHMJ) [R710]
106	0 F T 2 3 6 3 7 3 8 7 //	AK	N	C	Screw (APZ46000-003)
107	0 F T 2 3 6 4 2 9 0 9 //	AH		C	Reactor (CX40357-004) [L710,L715]
108	0 F T 2 3 6 4 2 9 1 7 //	BA		C	Reactor (CX40357-005) [L706]
109	0 F T 2 3 6 4 4 6 1 8 //	AL		C	Variable resistor (EVM-4LGA00B22) [RV701]
110	0 F T 2 3 6 4 4 6 3 4 //	AK		C	Variable resistor (EVM-4LGA00B13) [RV702,RV705]
111	0 F T 2 3 6 6 5 9 8 4 //	AU		B	Rectifier (D15XB60) [RC702]
112	0 F T 2 3 6 7 1 6 5 8 //	AP		B	IC (UPC78M05AHF) [Z704]
113	0 F T 2 3 6 9 7 3 5 5 //	AU		C	Absover (ERZV10D471) [NR701]
114	0 F T 2 3 7 0 7 5 9 8 //	AD		C	Metal film resistor (RSMF1RB 22ΩJ) [R749,R750]
115	0 F T 2 3 7 0 9 6 0 4 //	AP		B	Rectifier (D15SCA4M) [RC708]
116	0 F T 2 3 7 2 3 1 1 9 //	AL		A	Fuse (FBT5 AC125V 5A) [PN1,F701,F706]
117	0 F T 2 3 7 2 3 1 2 7 //	AK		A	Fuse (FBT6.3 AC125V 6.3A) [F703,F709]
118	0 F T 2 3 7 5 3 0 8 5 //	AF	N	C	Ceramic capacitor (DE0605SL470J2K) [C724]
119	0 F T 2 3 7 6 1 1 1 8 //	AP		A	Fuse (FBT3) [F707,F708]
120	0 F T 2 3 7 6 4 2 7 3 //	AF	N	C	Ceramic capacitor (DE0705R471K1K) [C717,C718,C732,C740,C763]
121	0 F T 2 3 7 6 5 3 8 5 //	AD		C	Metal film resistor (RSMF1RB 10ΩJ) [R840]
122	0 F T 2 3 7 6 5 4 0 7 //	AD		C	Metal film resistor (RSMF1RB 1.5KΩJ) [R863,R864]
123	0 F T 2 3 7 7 0 2 7 3 //	AD		C	Metal film resistor (RSMF12B 100K OHMJ) [R701,R711,R712]
124	0 F T 2 3 7 7 9 5 5 6 //	AP		A	Fuse (AC125V 0.16A) [F705]
125	0 F T 2 3 7 8 3 4 1 3 //	AF		B	Zener diode (RD10ES-B2) [D760]
126	0 F T 3 1 6 5 6 3 8 9 //	BA	N	B	Transformer EXT42820-600 [T701]
127	0 F T 3 1 6 5 6 8 6 9 //	BA	N	C	Reactor EXL42850-191B [L704]
128	0 F T 3 3 0 0 1 4 6 0 //	AK		B	Photo coupler (PC123FY) [PC701,PC702,PC703]
129	0 F T 3 3 0 5 5 2 0 0 //	AG		C	Terminal (00438 JIS C1100R-1/4H SNPB)
130	0 F T 3 3 0 7 3 6 3 1 //	AU	N	B	Rectifier F6P20F [RC706]
131	0 F T 3 3 0 7 7 1 7 3 //	AK	N	C	Metal film resistor (RSMF1.5KΩJ) [R836]
132	0 F T 3 3 0 9 4 4 9 3 //	AF	N	C	Capacitor AMC-103K50 [C2,C709,C720,C800,C824,C854]
133	0 F T 3 3 0 9 4 5 1 5 //	AF	N	C	Capacitor AMC-472K50 [C4]
134	0 F T 3 3 1 0 5 3 4 7 //	AS		B	Traiac (TMG16C60F) [CR701]
135	0 F T 3 3 1 6 7 2 8 8 //	AF		C	Ceramic capacitor (DE1007E222M-KH) [C702,C703,C711]
136	0 F T 3 3 1 8 3 1 0 0 //	AZ	N	B	IC (UPC2412AHF) [Z705]
137	0 F T 3 3 1 8 5 5 5 3 //	AF	N	C	Ceramic capacitor (DE0905R102K1KV) [C744,C745,C746,C747,C748,C749,C750,C751,C772,C773,C794,C795]
138	0 F T 3 3 2 8 3 7 2 5 //	AF	N	C	Film capacitor (AMC-103K50) [C712,C722,C726]
139	0 F T 3 3 2 8 3 7 3 3 //	AP	N	C	Capacitor AMC-47350 [C7]
140	0 F T 3 3 2 9 3 9 7 6 //	AF		C	Ceramic capacitor (DD104-63CH470J50) [C799]
141	0 F T 3 3 3 2 2 0 7 0 //	AU		C	Connector (B26B-XADSS-F) [CN704]
142	0 F T 3 3 3 2 2 0 8 9 //	AU		C	Connector (B30B-XADSS-F) [CN703]
143	0 F T 3 3 3 2 2 0 9 7 //	AU		C	Connector (B34B-XADSS-F) [CN702]
144	0 F T 3 3 3 8 5 0 0 5 //	AU	N	B	IC (UPC2933HF) [Z707]
145	0 F T 3 3 4 0 8 1 8 8 //	AZ	N	B	FET 2SK2368 [Q702,Q703,Q704]
146	0 F T 3 3 4 0 9 6 0 //	AZ	N	B	IC (FA5316P) [Z701]
147	0 F T 3 3 4 4 1 5 9 2 //	AP	N	C	Film capacitor (ECQU2A105ML) [C701]
148	0 F T 3 3 4 4 1 6 1 4 //	AP	N	C	Film capacitor (ECQU2A474ML) [C707]
149	0 F T 3 3 4 5 2 4 6 2 //	AU	N	C	Tubu (45H-DIA13.5-30)
150	0 F T 3 3 4 6 3 8 5 5 //	AP	N	C	Cement resistor (MEG05N6R8JB135 5W6.8OHMJ) [R714,R715]
151	0 F T 3 3 4 7 7 0 1 5 //	BA	N	C	Chemical capacitor (HU42D122MRZ) [C714,C715]
152	0 F T 3 3 4 7 7 0 3 1 //	BA	N	C	Reactor (S5688G) [L712]
153	0 F T 3 3 4 7 7 0 5 8 //	BA	N	C	Reactor LF-25-25280 [L701,L702]
154	0 F T 3 3 4 7 9 6 4 6 //	AZ	N	B	FET 2SK2368 [Q732]
155	0 F T 3 3 4 8 6 8 9 8 //	BA	N	C	Fin (APH34200-524)
156	0 F T 3 3 4 8 6 9 2 8 //	AK	N	C	Plate
157	0 F T 3 3 4 8 6 9 4 4 //	AX	N	C	Fin (APH34200-523)
158	0 F T 3 3 4 8 7 3 9 8 //	BF	N	C	Chassis

54 DC Power supply PWB200Vseries(and 100V series AR-287,337)

63 RSPF 2(AR-507)

64 RSPF 3(AR-507)

65 RSPF 4(AR-507)

66 RSPF 5(AR-507)

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PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
[C]					
CCAB-0888FC62	1- 10	BD	N	E	
CCAB-0888FC63	1- 10	BD	N	E	
CCAB-0888FC64	1- 10	BD	N	E	
CCAB-0888FC65	1- 10	BD	N	E	
CCAB-0927FC41	1- 10	BB	N	E	
CCAB-0927FC42	1- 10	BB	N	E	
CCAB-0927FC44	1- 10	BB	N	E	
CCAB-0927FC45	1- 10	BB	N	E	
CFRM-0953FC02	17- 23	AS	N	C	
CiNSE1949FC51	39- 37	AZ	N	D	
CiNSE1950FC51	39- 39	AP	N	D	
CiNSE1951FC51	39- 37	BB	N	D	
CiNSE1954FC51	39- 37	BB	N	D	
CiNSE1977FC51	39- 37	AZ	N	D	
CiNSE1978FC51	39- 39	AQ	N	D	
CiNSE1979FC51	39- 37	BA	N	D	
CiNSE1982FC51	39- 37	BB	N	D	
CiNSF1952FC51	39- 37	BE	N	D	
CiNSF1980FC51	39- 37	BE	N	D	
CiNSG1953FC51	39- 37	BE	N	D	
CiNSG1981FC51	39- 37	BE	N	D	
CiNSR1959FC51	39- 37	BE	N	D	
CiNSR1987FC51	39- 37	BE	N	D	
CiNSS1955FC51	39- 37	BE	N	D	
CiNSS1983FC51	39- 37	BE	N	D	
CiNSZ1960FC51	39- 37	BE	N	D	
CiNSZ1988FC51	39- 37	BE	N	D	
CPAKA5760FC32	39- 7	BE	N	D	
CPLTM5400FC01	10- 32	AP		C	
CPLTM5401FC02	10- 32	AY		C	
CPLTM5435FC02	6- 33	AN		C	
CPNLC0242FC03	3- 33	AU		D	
CPNLC0242FC06	3- 33	AT		D	
CPWBF1287FC32	54-901	CB	N	E	
CPWBF1419FC31	53-901	CB	N	E	
“	54-901	CB	N	E	
CPWBN1418FC52	9- 79	BQ	N	E	
CPWBN1437FC53	5- 53	CZ	N	E	
“	44-901	CZ	N	E	
CPWBN1438FC51	43-901	DB	N	E	
CPWBN1438FC52	5- 53	DB	N	E	
“	43-901	DB	N	E	
CPWBN1439FC51	5- 53	DB	N	E	
“	43-901	DB	N	E	
CPWBN1440FC31	40-901	BY	N	E	
CPWBN1441FC31	41-901	BY	N	E	
CPWBN1442FC31	3- 2	BY	N	E	
“	46-901	BY	N	E	
CPWMN1438FC51	5- 53	DB	N	E	
[D]					
DHAi-2904FC12	11- 25	AM	N	C	
DHAi-3070FCZZ	10- 44	BY		C	
DHAi-3090FCZZ	10- 44	AP		C	
DHAi-3133FCZZ	5- 31	AT	N	C	
DHAi-3134FCZZ	5- 31	AS	N	C	
DUNT-6984FC23	9- 2	CT	N	E	
DUNT-6984FC24	9- 2	CT	N	E	
DUNT-6984FC31	9- 2	CU	N	E	
DUNT-7051FCZZ	5- 67	CC	N	E	
DUNTW6931FC23	16-901	CC	N	E	
“	17-901	CC	N	E	
DUNTW6931FC24	16-901	CC	N	E	
“	17-901	CC	N	E	
DUNTW6931FC25	16-901	CC	N	E	
“	17-901	CC	N	E	
DUNTW6931FC44	16-901	CC	N	E	
“	17-901	CC	N	E	
DUNTW6931FC45	16-901	CC	N	E	
“	17-901	CC	N	E	
[G]					
GCAB-0933FCZZ	2- 19	AW	N	D	
[H]					
HPNLC0241FCZZ	3- 28	AX		D	
HPNLH0238FCZ1	3- 9	BF		D	
[L]					
LDAiU0615FCZZ	12- 21	AG	N	C	
LPLTM5398FCZZ	11- 14	AR		C	
LPLTM5430FCZ1	6- 45	AN		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK
LPLTM5666FCZ1	10- 50	AF		C
LPLTM5666FCZZ	10- 49	AG		C
LSUPP0060FCZZ	11- 15	AA		C
LX-NZ0032FCZZ	43- 1	AA		C
【N】				
NFANP0048FCZZ	9- 51	AY		B
NFANP0060FCZZ	9- 51	AX		B
NFLY-0010FCZZ	12- 10	AN		C
【P】				
PCÖVP1454FCZ1	5- 4	AN		C
PCÖVP1518FCZZ	5- 10	AE		D
PCÖVW0829FCZZ	43- 2	AC		D
PCUSS0369FCZZ	5- 92	AF		C
PCUSS0371FCZZ	5- 91	AE	N	C
PSHEP4812FCZZ	3- 8	AR	N	C
PSHEP4816FCZ1	3- 37	AE	N	C
〃	39- 41	AE	N	C
PSHEP4816FCZ2	3- 37	AE	N	C
〃	39- 41	AE	N	C
PSHEP4816FCZ3	3- 37	AE	N	C
〃	39- 41	AE	N	C
PSHEP4816FCZZ	3- 37	AE	N	C
〃	39- 41	AE	N	C
PSHEP4817FCZ1	3- 37	AE	N	C
〃	39- 41	AE	N	C
PSHEP4817FCZ2	3- 37	AE	N	C
〃	39- 41	AE	N	C
PSHEP4817FCZ3	3- 37	AE	N	D
〃	39- 41	AE	N	D
PSHEP4817FCZZ	3- 37	AE	N	C
〃	39- 41	AE	N	C
PSHEP4818FCZ1	3- 27	AH	N	C
〃	39- 41	AE	N	C
PSHEP4818FCZ2	3- 27	AE	N	C
〃	39- 41	AE	N	C
PSHEP4818FCZ3	3- 27	AE	N	C
〃	39- 41	AE	N	C
PSHEP4818FCZZ	3- 27	AH	N	C
〃	39- 41	AE	N	C
PSHEP4851FCZZ	9- 95	AB	N	C
PSHEZ4819FCZ1	3- 27	AH	N	C
〃	39- 41	AH	N	C
PSHEZ4819FCZ2	3- 27	AH	N	C
〃	39- 41	AH	N	C
PSHEZ4819FCZ3	3- 27	AH	N	C
〃	39- 41	AH	N	C
PSHEZ4819FCZZ	3- 27	AH	N	C
〃	39- 41	AH	N	C
PSPAZ1413FCZZ	43- 3	AC		C
【Q】				
QACCR7421QCZZ	11- 24	AY		C
QCNCM0972FCZZ	43- 4	AH		C
QCNCM0974FCZZ	43- 5	AK		C
QCNCM0990FCZZ	43- 6	AE		C
QCNCM0991FCZZ	43- 7	AG		C
QCNCM0998FCZZ	43- 8	AF		C
QCNCM1015FCZZ	43- 9	AG		C
QCNCW1020FCZZ	43- 10	AF		C
QCNCW1046FCZZ	43- 11	AK		C
QPLGA0005QCZZ	11- 24	AN	N	B
QSÖCZ0073FCZZ	40- 11	AL		C
〃	43- 12	AL		C
QSÖCZ6428ACZZ	43- 13	AE		C
【R】				
RC-KZ1054CCN2	43- 14	AB		C
RC i LF0080FCZZ	43- 15	AC		C
RCÖRF0030FCZZ	5- 90	AM		C
RCÖRF5010BCZZ	5- 84	AD		C
RCÖRF6693RCZZ	5- 85	AK		C
RCRS-0049FCZZ	43- 16	AP		B
RCRS-0050FCZZ	43- 16	AP		B
RCRS-0051FCZZ	43- 17	AP		B
RCRS-0052FCZZ	43- 17	AP		B
RCRS-0055FCZZ	43- 18	AP		B
RCRS-0056FCZZ	43- 19	AP		B
RCRS-0064FCZZ	43- 20	AP	N	B
RCRS-0065FCZZ	43- 20	AP	N	B
RCRSP6676RCZZ	43- 21	AG		B
RF i LN6012RCZZ	43- 22	AB		C
RF i LN6013RCZZ	43- 23	AB		C
RE i LZ0028FCZZ	43- 24	AD		C

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RFILZ0032FCZZ	43- 25	AD		C	
RMPTC4220QCJJ	43- 26	AC		B	
RMPTM0034FCZZ	43- 27	AC		B	
【S】					
SPAKA5895FCZ2	39- 2	AX	N	D	
SPAKA5896FCZ2	39- 2	AT		D	
SPAKA5962FCZ1	39- 2	AW	N	D	
SPAKA5963FCZ1	39- 2	AW	N	D	
SPAKA6074FCZZ	39- 12	AG	N	D	
SPAKC6081FC11	39- 1	BC	N	D	
SPAKC6081FC12	39- 1	BC	N	D	
SPAKC6081FC13	39- 1	BC	N	D	
SPAKC6081FC14	39- 1	BC	N	D	
SPAKC6081FC15	39- 1	BC	N	D	
SPAKC6081FCZZ	39- 1	BC	N	D	
SPAKC6082FC11	39- 1	BC	N	D	
SPAKC6082FC12	39- 1	BC	N	D	
SPAKC6082FCZZ	39- 1	BC	N	D	
SPAKC6083FC11	39- 1	BD	N	D	
SPAKC6083FC12	39- 1	BD	N	D	
SPAKC6084FCZZ	39- 1	BD	N	D	
【T】					
TCADS0649FCZZ	39- 36	AM		D	
TCADZ0098QSZZ	39- 42	AF		D	
TCADZ1442FCZZ	39- 43	AE		D	
TCADZ2001QCZA	39- 36	AE		D	
TGANE1001QCZB	39- 42	AC		D	
TLABH4259FCZZ	39- 52	AH		C	
TLABH4410FCZZ	39- 51	AK		C	
TLABH4411FCZZ	39- 50	AE		D	
【U】					
UBATL2033SCZZ	43- 28	AK		B	
【V】					
VCCCTV1HH300J	43- 29	AA		C	
VCCCTV1HH6R0D	43- 30	AA		C	
VCEA2U0JW108M	43- 31	AD		C	
VCEA2U1CW477M	43- 32	AD		C	
VCEA2U1VW227M	43- 33	AD		C	
VCEAJU0JW107M	43- 34	AB		C	
VCEAJU0JW226M	43- 35	AB		C	
VCEAJU0JW337M	43- 36	AC		C	
VCEAJU1HW105M	43- 37	AB		C	
VCEAJU1HW335M	43- 38	AB		C	
VCKYTV1HB102K	43- 39	AA		C	
VCKYTV1HF103Z	43- 40	AA		C	
VCKYTV1HF104Z	43- 41	AA		C	
VCKYTV1HF223Z	43- 42	AA		C	
VHDDAN202K/-1	46- 39	AB		B	
VHDDAN217//--1	43- 43	AC		B	
VHDDAP202K/-1	43- 44	AB		B	
"	46- 40	AB		B	
VHDDSS133HV-1	43- 45	AA		B	
VHDBR160L40-1	43- 46	AD		B	
VHDBR411D//--1	43- 47	AD		B	
VHEHZS5A1//--1	43- 48	AC		B	
VHEHZS6A1//--1	43- 49	AC		B	
VHERD22FB//--1	41- 37	AD		B	
VHi28F161A20C	40- 1	BE	N	B	
VHi28F161A21C	40- 1	BE	N	B	
VHi28F161A23C	40- 1	BE	N	B	
VHi28F161A24C	40- 1	BE	N	B	
VHi28F161A26C	41- 1	BE	N	B	
VHi28F161A27C	41- 1	BE	N	B	
VHi28F162A13F	43-200	BL	N	B	
VHi28F162A14F	43-200	BL	N	B	
VHi28F162A16F	43-200	BL	N	B	
VHi28F162A17F	43-200	BL	N	B	
VHi28F162A19F	44-200	BL	N	B	
VHi28F162A20F	44-200	BL	N	B	
VHi28F321-02C	46- 1	BS	N	B	
VHi28F321-03C	46- 1	BS	N	B	
VHi28F321-05C	46- 1	BS	N	B	
VHi28F321-06C	46- 1	BS	N	B	
VHi28F321-08C	46- 1	BS	N	B	
VHi28F321-09C	46- 1	BS	N	B	
VHi74AC04SJX/	43- 50	AE	N	B	
VHi74AC08SJX/	43- 51	AE	N	B	
VHi74ACT08SCX	43- 52	AE	N	B	
VHi74ACT32SCX	43- 53	AD	N	B	
VHi74F32SJ/-1	46- 52	AE		B	
VHi74VHCT04-1	41- 53	AF		B	

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VHi74VHCT08AJ	43- 54	AD	N	B	
VHi74VHCT240X	43- 55	AF	N	B	
VHi74VHCT244X	43- 56	AF	N	B	
VHi74VHCT245X	43- 57	AF	N	B	
VHiAT28C64B-1	43- 58	AZ		B	
VHiD65806GL-1	43- 59	BK		B	
VHiD65808GL-1	43- 60	BM		B	
VHiD65948GL-1	43- 61	BH		B	
VHiD82165GC-1	43- 62	BE		B	
VHiD82355GN-1	43- 63	BS		B	
VHiD82356GN-1	43- 64	BS		B	
VHiDM74ALS574	43- 65	AK	N	B	
VHiDM74AS04JX	43- 66	AF	N	B	
VHiDM74AS157M	43- 67	AL	N	B	
VHiDM74AS74MX	43- 68	AG	N	B	
VHiDS90C401-1	43- 69	AU		B	
VHiHD74LV04AF	46- 55	AD		B	
VHiHD74LV08AF	46- 53	AD		B	
VHiHD74LV14AF	46- 56	AD		B	
VHiHD74LV32AF	40- 54	AD		B	
"	41- 54	AD		B	
"	46-100	AD		B	
VHi iS61C25612	43- 70	AN		B	
VHi iS61C51215	40- 42	AU		B	
"	41- 40	AU		B	
"	46-102	AU		B	
VHiLH537C0G-1	43- 71	BC		B	
VHiLM339NS/-1	43- 72	AD		B	
VHiLZ9AT36/-1	43- 73	BB		B	
VHiM66235FP-1	43- 74	AT		B	
VHiMB86604L-1	43- 75	BC		B	
VHiMCF5202P25	43- 76	BG		B	
VHiMM74HC138S	41- 45	AE	N	B	
VHiMM74HC151S	41- 46	AE	N	B	
VHiMM74HCT244	46-103	AF	N	B	
VHiNJU6356E-1	43- 77	AK		B	
VHiS61C102415	43- 78	AV	N	B	
VHiSD6416-100	43- 79	BG		B	
VHiTD62503F/-	43- 80	AG		B	
VHiXLi2050X-1	43- 81	BQ		B	
VHPMVR3864K-J	43- 82	AC		B	
VRS-RE3LA201J	41-106	AC	N	B	
VRS-RE3LA241J	41-107	AC	N	B	
VRS-TS2AD000J	43- 83	AA		C	
VRS-TS2AD101J	43- 84	AA		C	
VRS-TS2AD102J	43- 85	AA		C	
VRS-TS2AD103J	43- 86	AA		C	
VRS-TS2AD105J	43- 87	AA		C	
VRS-TS2AD122J	43- 88	AA		C	
VRS-TS2AD151J	43- 89	AA		C	
VRS-TS2AD200J	43- 90	AA		C	
VRS-TS2AD220J	43- 91	AA		C	
VRS-TS2AD221J	43- 92	AA		C	
VRS-TS2AD222J	43- 93	AA		C	
VRS-TS2AD223J	43- 94	AA		C	
VRS-TS2AD224J	43- 95	AA		C	
VRS-TS2AD301J	43- 96	AA		C	
VRS-TS2AD331J	43- 97	AA		C	
VRS-TS2AD363J	43- 98	AA		C	
VRS-TS2AD391J	43- 99	AA		C	
VRS-TS2AD393J	43-100	AA		C	
VRS-TS2AD472J	43-101	AA		C	
VRS-TS2AD562J	43-102	AA		C	
VRS-TS2AD683J	43-103	AA		C	
VRS-TS2AD820J	43-104	AA		C	
VRS-TS2AD911J	43-105	AA		C	
VRS-TS2AD913J	43-106	AA		C	
VRS-TW2ED221J	43-107	AA		C	
VRS-TW2ED331J	43-108	AA		C	
VRSTS2AD2940F	43-109	AA		C	
VRSTS2AD3570F	43-110	AA		C	
VSDTA114YK/-1	43-111	AC		B	
VSDTC114EK/-1	40-101	AB		B	
"	41-105	AB		B	
"	43-112	AB		B	
VSDTC114YK/-1	43-113	AC		B	
VSDTC124XK/-1	43-114	AB		B	
【X】					
XHBSE40P08000	12- 22	AA		C	
【O】					
OCW2254K003C/	64- 1	AU		C	

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0CW2254K521//	65- 61	AG		C	
0CW2254K530H//	66-127	CA		E	
0CW2254P047B//	65- 16	AF		C	
0CW2254P049C//	63- 1	AG		D	
0CW2254P114E//	64- 18	AT	N	C	
0CW2254P330B//	66- 78	AE		C	
0CW2254P496//	65- 60	AE		C	
0CW4048P300//	66-140	AC		C	
0FT23006212//	53- 1	AP		B	
0FT23007529//	53- 2	AF	N	B	
0FT23034135//	53- 3	AC		C	
0FT23055159//	53- 4	AD		B	
0FT23078361//	53- 5	AH		B	
0FT23078876//	53- 6	AH		B	
0FT23080986//	53- 7	AG		B	
0FT23088421//	53- 8	AK		C	
0FT23105423//	53- 9	AE		C	
0FT23107000//	53- 10	AC	N	B	
0FT23138429//	53- 11	AK		B	
0FT23144925//	53- 12	AD	N	C	
0FT23149366//	53- 13	AH		B	
0FT23150526//	53- 14	AN		C	
0FT23165175//	53- 15	AH		C	
0FT23188655//	53- 16	AP		C	
0FT23188663//	53- 17	AH		C	
0FT23188728//	53- 18	AP		C	
0FT23195236//	53- 19	AC		B	
0FT23198634//	53- 20	AF		B	
0FT23223116//	53- 21	AF		B	
0FT23239837//	53- 22	AK		C	
0FT23246191//	53- 23	AF		B	
0FT23246205//	53- 24	AF		B	
0FT23259196//	53- 25	AK	N	C	
0FT23259242//	53- 26	AF		C	
0FT23259269//	53- 27	AF		C	
0FT23259285//	53- 28	AF		C	
0FT23259307//	53- 29	AH		C	
0FT23262464//	53- 30	AU		C	
0FT23265420//	53- 31	AE		B	
0FT23285758//	53- 32	AK		B	
0FT23287815//	53- 33	AF		C	
0FT23288153//	53- 34	AE		B	
0FT23291235//	53- 35	AE		B	
0FT23292762//	53- 36	AL		C	
0FT23305589//	53- 37	AK	N	C	
0FT23330605//	53- 38	AF	N	B	
0FT23339823//	53- 39	AK	N	C	
0FT23355705//	53- 40	AF		B	
0FT23371158//	53- 41	AK		C	
0FT23382060//	53- 42	AN	N	C	
0FT23382079//	53- 43	AG		C	
0FT23397858//	53- 44	AK	N	C	
0FT23400433//	53- 45	AF		B	
0FT23405087//	53- 46	AN		B	
0FT23412644//	53- 47	AH		C	
0FT23413403//	53- 48	AU		B	
0FT23418200//	53- 49	AC	N	C	
0FT23418235//	53- 50	AC		C	
0FT23418383//	53- 51	AC		C	
0FT23418421//	53- 52	AC		C	
0FT23418510//	53- 53	AC		C	
0FT23418529//	53- 54	AC		C	
0FT23418537//	53- 55	AC		C	
0FT23418545//	53- 56	AC		C	
0FT23418553//	53- 57	AC		C	
0FT23418588//	53- 58	AC		C	
0FT23418596//	53- 59	AC		C	
0FT23418618//	53- 60	AC		C	
0FT23418626//	53- 61	AC		C	
0FT23418634//	53- 62	AC		C	
0FT23418669//	53- 63	AC		C	
0FT23418685//	53- 64	AC		C	
0FT23418693//	53- 65	AC		C	
0FT23418715//	53- 66	AC	N	C	
0FT23418804//	53- 67	AC		C	
0FT23418820//	53- 68	AC		C	
0FT23419002//	53- 69	AC	N	C	
0FT23419010//	53- 70	AC		C	
0FT23419401//	53- 71	AC		C	
0FT23419452//	53- 72	AC		C	
0FT23419584//	53- 73	AC	N	C	

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0FT23423816//	53- 74	AC		C	
0FT23429784//	53- 75	AU		B	
0FT23453847//	53- 76	AC		C	
0FT23455750//	53- 77	AF	N	C	
0FT23476820//	53- 78	AK		C	
0FT23483428//	53- 79	AF		B	
0FT23486192//	53- 80	AH	N	C	
0FT23516261//	53- 81	AD		C	
0FT23537080//	53- 82	AD		C	
0FT23537129//	53- 83	AD		C	
0FT23537137//	53- 84	AD		C	
0FT23537226//	53- 85	AD		C	
0FT23539423//	54-258	AD	N	B	
0FT23555402//	53- 86	AK		C	
0FT23562298//	53- 87	AD		A	
0FT23562298//	53- 88	AD	N	C	
0FT23562336//	53- 89	AD	N	C	
0FT23562379//	53- 90	AD	N	C	
0FT23562794//	53- 91	AD	N	C	
0FT23562816//	53- 92	AC	N	C	
0FT23562859//	53- 93	AD	N	C	
0FT23562875//	53- 94	AD	N	C	
0FT23563073//	53- 95	AC	N	C	
0FT23563278//	53- 96	AC	N	C	
0FT23563286//	53- 97	AC		C	
0FT23563316//	53- 98	AC		C	
0FT23563456//	53- 99	AC	N	C	
0FT23563871//	53-100	AF	N	C	
0FT23593282//	53-101	AH		C	
0FT23601552//	53-102	AF		B	
0FT23606732//	53-103	AD		B	
0FT23611329//	53-104	AK		C	
0FT23621944//	53-105	AC	N	C	
0FT23637387//	53-106	AK	N	C	
0FT23642909//	53-107	AH		C	
0FT23642917//	53-108	BA		C	
0FT23644618//	53-109	AL		C	
0FT23644634//	54-257	AL	N	B	
0FT23665984//	53-110	AK		C	
0FT23671658//	53-111	AU		B	
0FT23697355//	53-112	AP		B	
0FT23707598//	53-113	AU		C	
0FT23709604//	53-114	AD		C	
0FT23723119//	53-115	AP		B	
0FT23723127//	53-116	AL		A	
0FT23753085//	53-117	AK		A	
0FT23761118//	53-118	AF	N	C	
0FT23764273//	53-119	AP		A	
0FT23765385//	53-120	AF	N	C	
0FT23765407//	53-121	AD		C	
0FT23770273//	53-122	AD		C	
0FT23779556//	53-123	AD		C	
0FT23783413//	53-124	AP		A	
0FT31656389//	53-125	AF		B	
0FT31656869//	53-126	BA	N	B	
0FT33001460//	53-127	BA	N	C	
0FT33055250//	53-128	AK		B	
0FT33073631//	53-129	AG		C	
0FT33077173//	53-130	AU	N	B	
0FT33094493//	53-131	AK	N	C	
0FT33094515//	53-132	AF	N	C	
0FT33105347//	53-133	AF	N	C	
0FT33167288//	53-134	AS		B	
0FT33183100//	53-135	AF		C	
0FT33185553//	53-136	AZ	N	B	
0FT33283725//	53-137	AF	N	C	
0FT33283733//	53-138	AF	N	C	
0FT33293976//	53-139	AP	N	C	
0FT33322070//	53-140	AF		C	
0FT33322089//	53-141	AU		C	
0FT33322097//	53-142	AU		C	
0FT33385005//	53-143	AU		C	
0FT33408188//	53-144	AU	N	B	
0FT33440960//	53-145	AZ	N	B	
0FT33441592//	53-146	AZ	N	B	
0FT33441614//	53-147	AP	N	C	
0FT33452462//	53-148	AP	N	C	
0FT33463855//	53-149	AU	N	C	
0FT33477015//	53-150	AP	N	C	
0FT33477031//	53-151	BA	N	C	
0FT33477031//	53-152	BA	N	C	

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2000 March

# SHARP

# PARTS GUIDE

CODE:00ZAR505//P1E

## AR-280/285/335 AR-281/286/336 MODEL AR-250/405/505

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| 6  | Optical unit 2   | 43 | ICU PWB(AR-250,281,286,336,405)   |
| 7  | Copy lamp unit   | 44 | ICU PWB(for AR-505)   |
| 8  | 2nd,3rd mirror holder unit                                 | 45 | Operation control PWB(for AR-280,285,335)                               |
| 9  | Frame section  | 46 | Operation control PWB<br>(except for AR-280,285,335)                    |
| 10 | Rear frame 1<br>(PCU PWB,DC power PWB etc.)                | 47 | Operation PWB R   |
| 11 | Rear frame 1(AC PWB,Frame etc)                             | 48 | Operation PWB L   |
| 12 | Rear frame 2   | 49 | Inverter PWB  |
| 13 | Photo conductor unit                                       | 50 | AC PWB  |
| 14 | Toner hopper unit  | 51 | Scanner drive PWB   |
| 15 | Developer unit   | 52 | ORS PD PWB  |
| 16 | Fusing unit 1  | 53 | DC Power supply PWB<br>..[AR-405,505(100V series)]                      |
| 17 | Fusing unit 2  | 54 | DC Power supply PWB..200V series<br>(and 100V series except AR-405,505) |
| 18 | Delivery turnover unit 1<br>(AR-405,505 1bin, others 2bin) | 55 | RADF Exteriors(for AR-405)  |
| 19 | Delivery turnover unit 2<br>(AR-405,505 1bin, others 2bin) | 56 | RADF Transport belt section(for AR-405)                                 |
| 20 | Vertical transport right door unit                         | 57 | RADF Paper feeding transport section 1<br>(for AR-405)                  |
| 21 | Vertical transport unit                                    | 58 | RADF Paper feeding transport section 2<br>(for AR-405)                  |
| 22 | PS transport unit  | 59 | RADF Reversion transport section(for AR-405)                            |
| 23 | Suction unit   | 60 | RADF Paper feedig tray section(for AR-405)                              |
| 24 | Main drive unit 1  | 62 | RADF PBA-Control PWB(for AR-405)  |
| 25 | Main drive unit 2  | 63 | RSPF unit 1(for AR-505)   |
| 26 | Paper feeding drive unit 1                                 | 64 | RSPF unit 2(for AR-505)   |
| 27 | Paper feeding drive unit 2                                 | 65 | RSPF unit 3(for AR-505)   |
| 28 | DV drive unit  | 66 | RSPF unit 4(for AR-505)   |
| 29 | Fusing drive unit  | 67 | RSPF unit 5(for AR-505)   |
| 30 | DV guide unit  | 68 | RSPF unit(PWB section)(for AR-505)                                      |
| 31 | Multi manual paper feeding unit 1                          | 69 | ADU unit 1  |
| 32 | Multi manual paper feeding unit 2                          | 70 | ADU unit 2  |
| 33 | Waste toner unit   | 71 | ADU unit 3  |
| 34 | Tray paper feeding unit                                    | 72 | ADU unit 4  |
| 35 | Multi manual paper feeding tray unit                       |    | ■ Index   |
| 36 | MC unit  |    |   |
| 37 | TC unit  |    |   |

**SHARP CORPORATION**

This document has been published to be used for after sales service only.  
The contents are subject to change without notice.

## DEFINITION

The definition of each Rank is as follows and also noted in the list

A : Parts necessary to be stocked as High usage parts.

B : Parts necessary to be stocked as Standard usage parts.

C : Low usage parts.

D : Parts necessary for refurbish.

E : Unit parts recommended to be stocked for efficient after sales service.

Please note that the lead time for the said parts may be longer than normal parts.

S : Consumable parts.

Please note that the following parts used in Copier under the same description are classified into A or B Rank depending upon the place used.

Example: Gear made of Metal, Sprocket, Bearing, Belt made of Rubber, Spring clutch mechanism.

A Rank : The parts which may be with the revolution or loading.

B Rank : Parts similar to A Rank parts, but are not included in Rank A.

Because parts marked with "△" is indispensable for the machine safety maintenance and operation, it must be replaced with the parts specific to the product specification.

○ Other than this Parts Guide, please refer to documents Service Manual of this model.

○ Please use the 13 digit code described in the right hand corner of front cover of the document, when you place an order.

○ For U.S. only-Use order codes provided in advertising literature. Do not order from parts department.

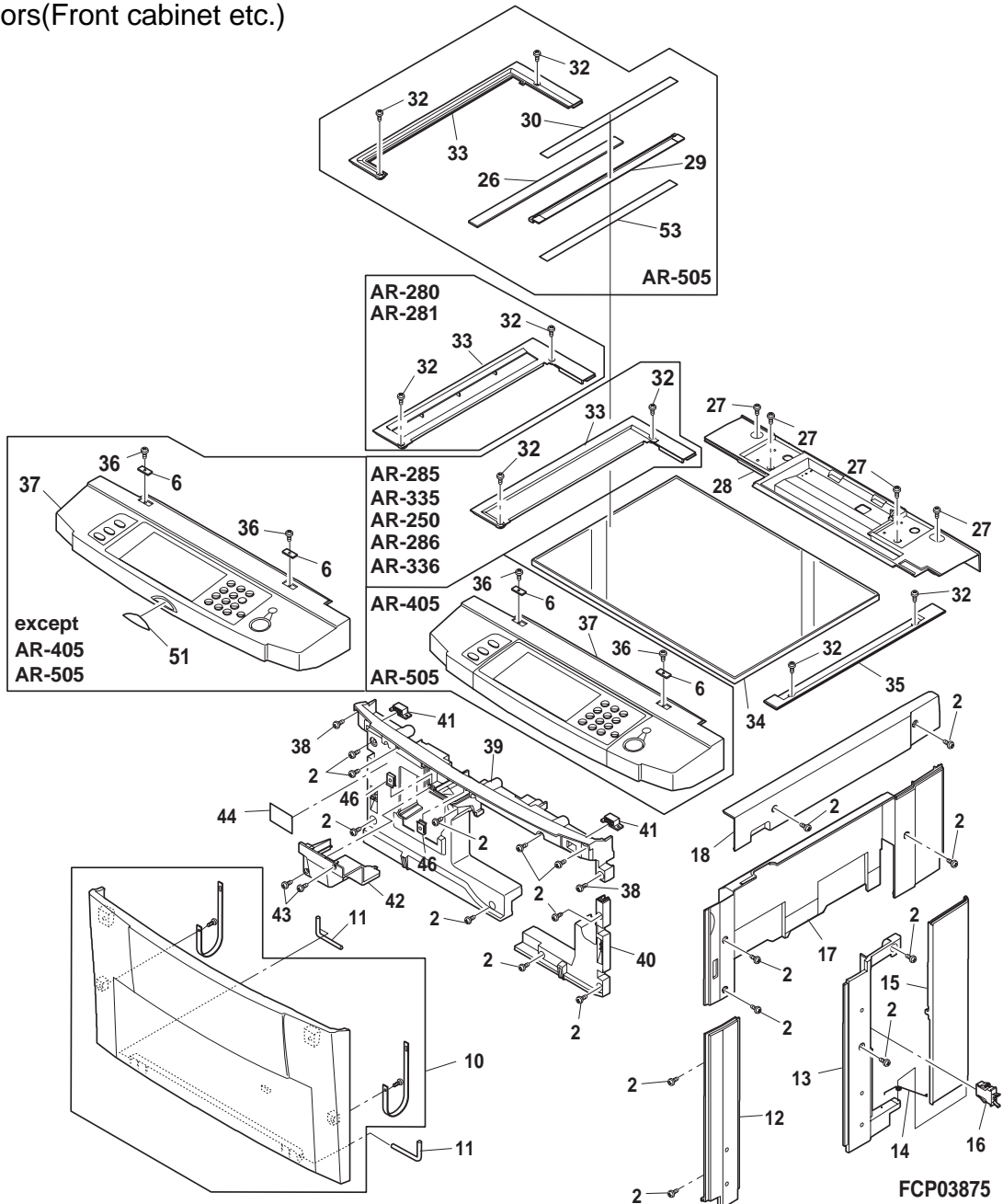
## 1 Exteriors(Front cabinet etc.)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
2	XHBSE40P08000	AA		C	Screw (4×8)
6	LPLTM2573FCZ1	AD		C	MG plate
8	XEBSD40P08000	AA		C	Screw (4×8)
9	LBNDJ0070FCZZ	AD		C	Delivery exterior band
10	CCAB-0888FC36	BD		E	Front exterior unit [AR-280]
	CCAB-0888FC37	BD		E	Front exterior unit [AR-285]
	CCAB-0888FC38	BD		E	Front exterior unit [AR-335]
	CCAB-0888FC50	BD		E	Front exterior unit (USA only)[AR-250]
	CCAB-0888FC46	BC		E	Front exterior unit (Except USA)[AR-250]
	CCAB-0888FC51	BD		E	Front exterior unit (USA only)[AR-281]
	CCAB-0888FC47	BC		E	Front exterior unit (Except USA)[AR-281]
	CCAB-0888FC52	BD		E	Front exterior unit (USA only)[AR-286]
	CCAB-0888FC48	BC		E	Front exterior unit (Except USA)[AR-286]
	CCAB-0888FC53	BD		E	Front exterior unit (USA only)[AR-336]
	CCAB-0888FC49	BC		E	Front exterior unit (Except USA)[AR-336]
	CCAB-0927FC33	BD		E	Front exterior unit (USA only)[AR-405]
	CCAB-0927FC32	BD		E	Front exterior unit (Except USA)[AR-405]
	CCAB-0927FC36	BD	N	E	Front exterior unit (USA only)[AR-505]
	CCAB-0927FC35	BD	N	E	Front exterior unit (Except USA)[AR-505]
11	LPIIN-0277FCZZ	AB		C	Slide pin,ADU delivery side rail
12	GCAB-0890FCZZ	AL		D	Right exterior lower front
13	GCAB-0891FCZZ	AP		D	Right exterior lower rear
14	MSPRC2612FCZZ	AC		C	Waste toner cover spring
15	PCOVP1430FCZZ	AQ		C	Waste toner cover
16	PKAi-1080CESA	AE		C	Lock mechanism
17	GCAB-0889FCZ1	AX		D	Right exterior upper
18	GCAB-0895FCZZ	AR		D	Upper exterior right
26	PGLSP0101FCZZ	AS	N	B	RSPF glass [AR-505]
27	XHBSE40P10000	AA		C	Screw (4×10)
28	GCAB-0897FCZ3	AS		D	Upper exterior rear
29	PGiDM1873FCZ1	AG	N	C	Size guide [AR-505]
30	TLABZ4390FCZZ	AG	N	C	Size label (Inch series)[AR-505]
	TLABZ4389FCZZ	AH	N	C	Size label (AB series)[AR-505]
32	XBTSE40P04000	AA		C	Screw (4×4)
33	0CW2235P041//	AT		C	SPF table glass fixing plate left (Inch series)[AR-280]
	0CW2235P042//	AT		C	SPF table glass fixing plate left (AB series)[AR-280]
	CFiX-0517FC03	AR		C	Table glass fixing plate left (Inch series)[except AR-280,505]
	CFiX-0517FC02	AR		C	Table glass fixing plate left (AB series)[except AR-280,405]
	LFiX-0538FCZZ	AL	N	C	Table glass fixing plate left [AR-505]
34	PGLSP0074FCZ8	BK		B	Table glass [except AR-505]
	PGLSP0100FCZZ	AZ	N	B	Table glass [AR-505]

# 1 Exteriors(Front cabinet etc.)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
35	L F i X - 0 5 1 6 F C Z Z	AL		C	Table glass fixing plate right
36	X B S S E 3 0 P 1 0 0 0 0	AA		C	Screw (3×10)
37	C P N L C 0 2 3 7 F C 0 3	AY		D	Operation panel (CANADA,Europe except U.Kingdom)[except AR-405,505]
	C P N L C 0 2 3 7 F C 0 2	AY		D	Operation panel (Other countries)[except AR-405,505]
	H P N L C 0 2 4 1 F C Z Z	AX		D	Operation panel (CANADA,Europe except U.Kingdom)[AR-405,505]
	C P N L C 0 2 4 1 F C 0 2	AY		D	Operation panel (Other countries)[AR-405,505]
38	X E B S E 4 0 P 0 8 0 0 0	AA		C	Screw (4×8)
39	P C O V P 1 4 2 8 F C Z Z	AZ		D	Frame cover A
40	P C O V P 1 4 2 9 F C Z Z	AP		D	Frame cover B
41	P M A G T 0 0 1 5 F C Z Z	AD		B	Magnet catch (10P)
42	P C O V P 1 4 3 1 F C Z Z	AK		D	ROM cover
43	X J B S D 4 0 P 1 2 0 0 0	AA		C	Screw (4×12)
44	T C A U S 1 0 3 8 F C Z Z	AD		C	Laser caution label
46	L X - N Z 0 0 8 8 F C Z Z	AC		C	Nut
47	X H B S E 3 0 P 0 6 0 0 0	AA		C	Screw (3×6)[except AR-405,505]
48	L H L D W 1 1 5 5 F C Z Z	AC		C	Wire holder (LWS3S2W)[AR-280]
49	P T P E - 0 2 5 1 F C Z Z	AD		C	Earth tape
50	T C A U H 1 0 2 8 F C Z Z	AC		C	Service caution label (USA,Canada)[except AR-405,505]
	T C A U A 0 7 6 6 F C Z Z	AB		C	Service caution label (U.Kingdom only)[except AR-405,505]
	T C A U H 0 9 1 8 F C Z Z	AA		C	Service caution label (Australia only)[except AR-405,505]
	T C A U A 0 7 7 0 F C Z Z	AB		C	Service caution label (Other cuntries)[except AR-405,505]
53	P S H E Z 4 7 7 0 F C Z Z	AF	N	C	White datum sheet

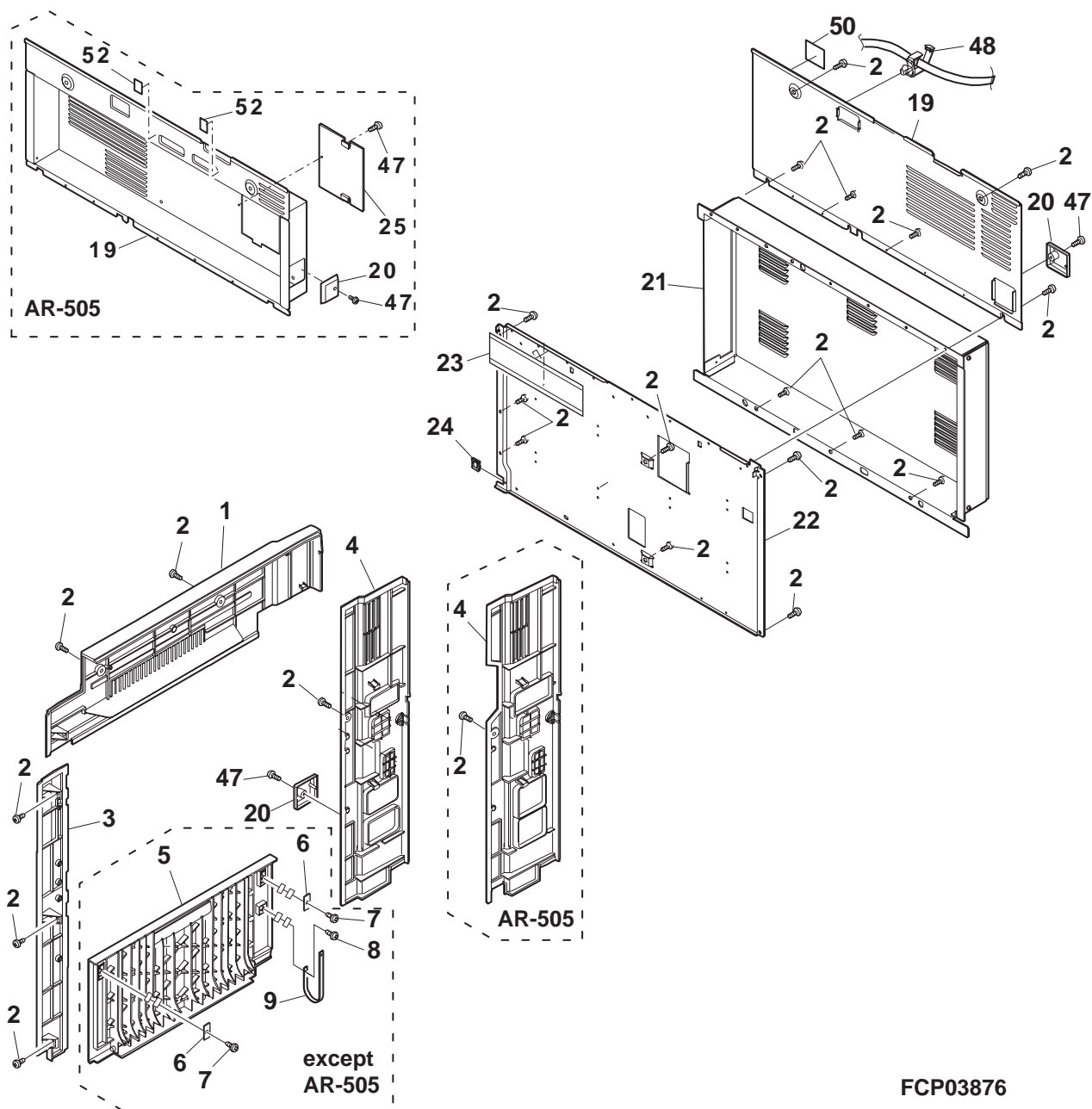
# 1 Exteriors(Front cabinet etc.)





– 3 –

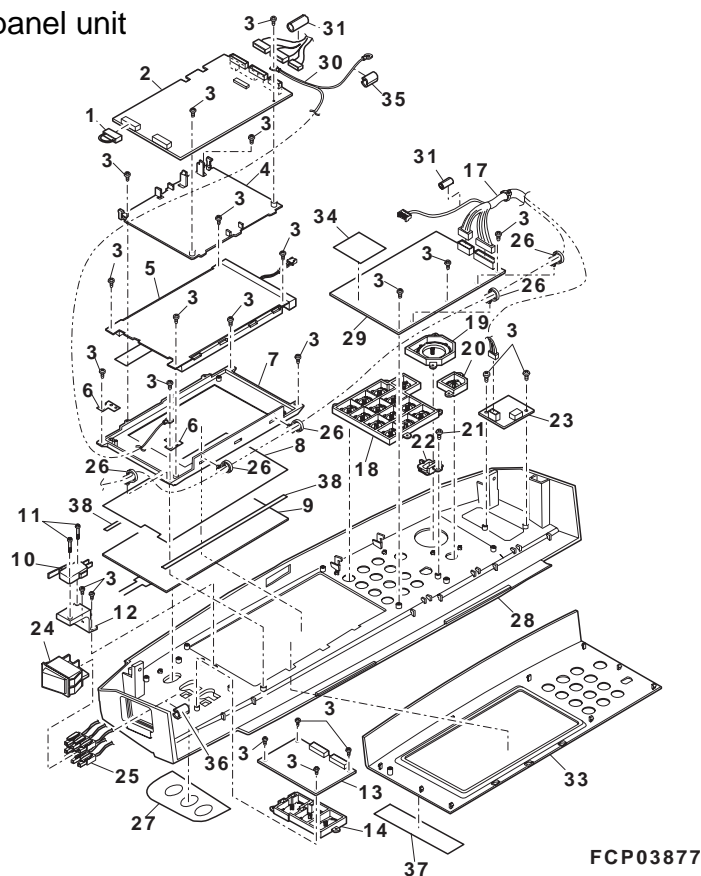
2 Exteriors(Rear,Left side cabinet etc.)



## 3 Operation panel unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	DHA i - 3026FCZZ	AD		C	Counter harness
	CPWBN1258FC52	CB		E	Operation control PWB [AR-280,285,335]
2	CPWBN1394FC51	BW		E	Operation control PWB [except AR-280,285,335,505]
	CPWBN1394FC52	BW	N	E	Operation control PWB (without FLASH PWB) [AR-505]
3	XEPSD30P08000	AA		C	Screw (3×8)
4	LHLDZ1360FCZZ	AH		C	LCD holder B
5	VVLLM400031-1	BY		B	LCD (LM400031) [except AR-405]
6	QEARP0097FCZZ	AD		C	LCD earth plate [except AR-405]
7	LHLDZ1359FCZZ	AL		C	LCD holder A [except AR-405]
	PSHEP4554FCZZ	AQ		C	LCD sheet (Canada,Europe except U.Kingdom)[AR-280,285,336]
8	PSHEP4553FCZZ	AQ		C	LCD sheet (Other countries)[AR-280,285,335]
	PSHEP4719FCZ1	AQ	N	C	LCD sheet (Canada,Europe except U.Kingdom)[except AR-280,285,336,405]
	PSHEP4718FCZ1	AQ	N	C	LCD sheet (Other countries)[except AR-280,285,336,405]
9	HPNLH0238FCZZ	BH		D	Touch panel [except AR-405]
10	QSW-M0502FCZZ	AH		B	Door switch (AM51632C531)
11	XEPSD30P16000	AA		C	Screw (3×16)
12	LHLDZ1385FCZZ	AF		C	Door switch holder
13	CPWBF1259FC62	AY	N	E	Operation PWB L
14	JBTN-0243FCZ1	AK		C	Change key [AR-280,285,335]
	JBTN-0243FCGZ	AK		C	Change key [except AR-280,285,335]
17	DHA i - 2821FCZZ	BA		C	Operation main harness
	CBTN-0239FC02	AN		C	Ten key [AR-280,285,335]
18	CBTN-0239FC03	AN		C	Ten key [except AR-280,285,335,505]
	CBTN-0239FC05	AN	N	C	Ten key [AR-505]
19	JBTN-0240FCZZ	AK		C	Copy key
20	CBTN-0241FC01	AH		C	CA key
21	XEPSD30P06000	AA		C	Screw (3×6)
22	CBTN-0242FC01	AL		C	Interrupt key
23	CPWBF1107FC52	AX		E	Inverter PWB
24	QSW-Z1390QCZZ	BA		B	Main switch
25	DHA i - 2953FCZZ	AV		C	Main switch harness
26	LBNDJ0013FCZ1	AA		C	Wire band
	PSHEZ4555FCZZ	AH		C	Panel sheet (English) (English)[AR-280,285,335]
	PSHEZ4726FCZZ	AH		C	Panel sheet (English) (English)[AR-250,281,286,336]
	PSHEZ4557FCZZ	AH		C	Panel sheet (French) (Canada)[AR-280,285,335]
	PSHEZ4728FCZZ	AH		C	Panel sheet (French) (Canada)[AR-250,281,286,336]
	PSHEZ4556FCZZ	AH		C	Panel sheet (German) (Germany)[AR-280,285,335]
	PSHEZ4727FCZZ	AH		C	Panel sheet (German) (Germany)[AR-250,281,286,336]
	PSHEZ4559FCZZ	AH		C	Panel sheet (Italian) (Italian area)[AR-280,285,335]
	PSHEZ4730FCZZ	AH		C	Panel sheet (Italian) (Italian area)[AR-250,281,286,336]
	PSHEZ4560FCZZ	AH		C	Panel sheet (Dutch) (Dutch area)[AR-280,285,335]
27	PSHEZ4731FCZZ	AH		C	Panel sheet (Dutch) (Dutch area)[AR-250,281,286,336]
	PSHEZ4558FCZZ	AH		C	Panel sheet (Spanish) (Spanish area)[AR-280,285,335]
	PSHEZ4729FCZZ	AH		C	Panel sheet (Spanish) (Spanish area)[AR-250,281,286,336]
	PSHEZ4561FCZZ	AH		C	Panel sheet (Swedish) (Swedish area)[AR-280,285,335]
	PSHEZ4732FCZZ	AH		C	Panel sheet (Swedish) (Swedish area)[AR-250,281,286,336]
	PSHEZ4703FCZZ	AK		C	Panel sheet (English) (Except Canada,Spanish area,Europe only available U.K)[AR-405,505]
	PSHEZ4704FCZZ	AK		C	Panel sheet (German) (Germany)[AR-405,505]
	PSHEZ4705FCZZ	AK		C	Panel sheet (French) (Canada)[AR-405,505]
	PSHEZ4706FCZZ	AK		C	Panel sheet (Spanish) (Spanish area)[AR-405,505]
	CPNLC0237FC03	AY		D	Operation panel (Canada,Europe except U.Kingdom)[except AR-405,505]
28	CPNLC0237FC02	AY		D	Operation panel (Other countries)[except AR-405,505]
	HPNLC0241FCZZ	AX		D	Operation panel (Canada,Europe except U.Kingdom)[AR-405,505]
	CPNLC0241FC02	AY		D	Operation panel (Other countries)[AR-405,505]
29	CPWBF1255FC61	BH		E	Operation PWB R [except AR-280,285,335]
	CPWBF1255FC52	BF		E	Operation PWB R [AR-280,285,335]
30	DHA i - 2949FCZZ	AF		C	Operation ESDFG harness
31	RCORF0029FCZZ	AN		C	Ferrite core (ZCAT2132113) (100V series)
	RCORF1036ACZZ	AP		C	Ferrite core (RFC-9DCCBL) (200V series)
	CPNLC0242FC03	AU		D	Operation panel B (Canada,Europe Except U.Kingdom)[AR-405]
33	CPNLC0242FC02	AT		D	Operation panel B (other countries)[AR-405]
	CPNLC0242FC06	AT	N	D	Operation panel B (Canada,Europe Except U.Kingdom)[AR-505]
	CPNLC0242FC05	AT	N	D	Operation panel B (other countries)[AR-505]
34	PSHEP4681FCZZ	AC		C	Harness pressure sheet (Australia,New Zealand,Europe,Taiwan,South Africa,Russia)[AR-405,505]
35	RCORF6661RCZZ	AK		C	Ferrite core (SFC-4) (200V series)
36	RCORF0037FCZZ	AS		C	Ferrite core (RFC13) (200V series)
	PSHEZ4566FCZZ	AE		C	Panel sheet B (Italian) (Italian area)[except AR-405,505]
	PSHEZ4567FCZZ	AE		C	Panel sheet B (Dutch) (Dutch are)[except AR-405,505]
	PSHEZ4565FCZZ	AE		C	Panel sheet B (Spanish) (Spanish area)[except AR-405,505]
	PSHEZ4568FCZZ	AE		C	Panel sheet B (Swedish) (Swedish area)[except AR-405,505]
	PSHEZ4562FCZZ	AE		C	Panel sheet B (English) (Canada,Germany)[except AR-405,505]
	PSHEZ4710FCZZ	AE		C	Panel sheet B (English) (Canada,Germany)[AR-405]
	PSHEZ4711FCZZ	AE		C	Panel sheet B (German) (Germany)[AR-405]
37	PSHEZ4712FCZZ	AE		C	Panel sheet B (French) (Canada)[AR-405]
	PSHEZ4564FCZZ	AE		C	Panel sheet B (French) (Canada)[except AR-405,505]
	PSHEZ4713FCZZ	AE		C	Panel sheet B (Spanish) (Spanish area)[AR-505]
	PSHEZ4710FCBZ	AE	N	C	Panel sheet B (English) (Canada,Germany)[AR-505]
	PSHEZ4711FCBZ	AE	N	C	Panel sheet B (German) (Germany)[AR-505]
	PSHEZ4563FCZZ	AE		C	Panel sheet B (German) (Germany)[except AR-405,505]
	PSHEZ4712FCBZ	AE	N	C	Panel sheet B (French) (Canada)[AR-505]
	PSHEZ4713FCBZ	AE	N	C	Panel sheet B (Spanish) (Spanish area)[AR-505]
38	PSHEP4784FCZZ	AB	N	C	LCD sheet

### 3 Operation panel unit

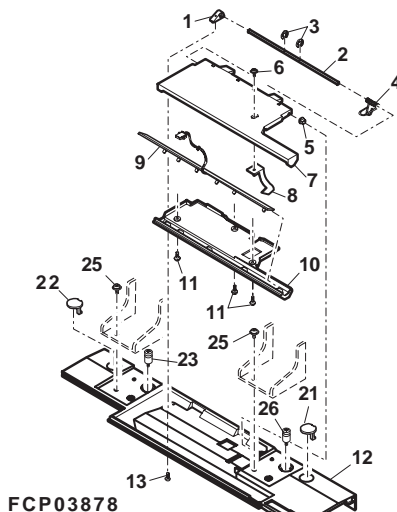


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### 4 Document size sensor unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LHLDZ1085FCZ1	AD		C	Original detection fulcrum holder
2	NSFTZ1805FCZZ	AE		C	Original detection fulcrum shaft
3	XRESP30-06000	AA		C	E type ring
4	MSPRT1563FCZZ	AC		C	Manuscript detect spring
5	LBSHZ1102CCZZ	AC		C	Bushing 1
6	XBPSD30P06KS0	AA		C	Screw (3×6KS)
7	MARMP0147FCZ1	AL		C	Original detection fulcrum arm upper
8	PSLDH0178FCZZ	AD		C	Original detect shield plate
9	CPWBF0934FC32	AX		E	ORS emission PWB
10	MARMP0148FCZ1	AL		C	Original detection fulcrum arm lower
11	XEPSD30P05000	AA		C	Screw (3×5)
12	GCAB-0897FCZ3	AS		D	Front exterior rear
13	XEPSD30P08000	AA		C	Screw (3×8)
21	PCOVP0911FCZ1	AC		C	Upper exterior rear cover R
22	PCOVP0941FCZ1	AC		C	Upper exterior rear cover L
23	LX-BZ0776FCZZ	AG		C	Screw R [except AR-250]
25	XBTSC50P16000	AA		C	Screw (5×16) [except AR-250]
26	LX-BZ0891FCZZ	AG		C	Screw [except AR-250,505]
	LX-BZ0842FCZZ	AG		C	Screw [AR-505]

### 4 Document size sensor unit



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## 5 Optical unit 1

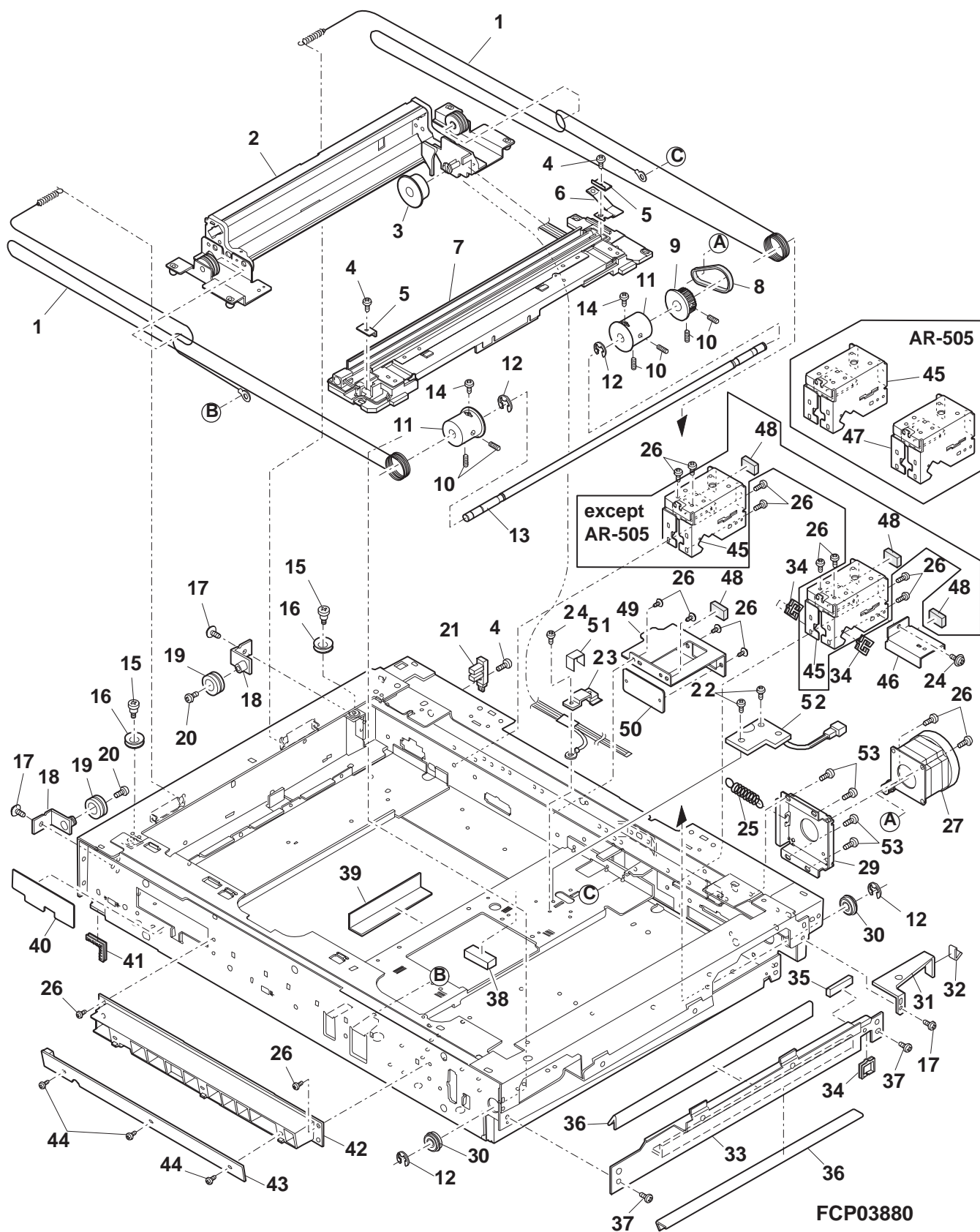
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LHLDW1115FCZZ	AD		C	Edge bushing
2	XBBS40P06000	AA		C	Screw (4×6)
3	XHBSE40P08000	AA		C	Screw (4×8)
4	PCÖVP1454FCZZ	AP		C	Dark box cover B [except AR-505]
	PCÖVP1454FCZ1	AN	N	C	Dark box cover B [AR-505]
5	XNESD40-32000	AA		C	Nut (M4)
6	NFANP0051FCZZ	BA		B	Fan (D04X-12)
7	XBPSD40P14000	AA		C	Screw (4×14)
8	LBSHC0345FCZZ	AC		C	Edge bushing (CE012SL50)
9	PCÖVP1456FCZ1	AH		C	AC harness cover
10	PCÖVP1518FCZZ	AE	N	D	ICU ROM cover [AR-505]
11	CCÖVP1453FC01	AQ		C	Dark box cover A
13	LX-BZ0335FCZZ	AA		C	Screw (4×6)(Red)
14	CDAIU0578FC31	BZ		E	CCD unit [AR-280,285,335]
	CDAIU0578FC33	BX		E	CCD unit [AR-250,281,286,336]
	CDAIU0578FC32	BZ		E	CCD unit [AR-405,505]
15	QCNW-0160FCZZ	AE		C	CCD PWB harness FFC1
16	QCNW-0161FCZZ	AF		C	CCD PWB harness FFC2
17	LRALM0157FCZZ	AG		C	MB-B rail R
18	LRALM0156FCZZ	AH		C	MB-B rail F
19	DHAi-2862FCZZ	AW		C	MSW interface harness [except AR-505]
	DHAi-3111FCZZ	AT	N	C	MSW interface harness [AR-505]
20	DHAi-2895FCZZ	AY		C	ORS interface harness [except AR-505]
	DHAi-3112FCZZ	AV	N	C	ORS interface harness [AR-505]
21	LBNDJ0013FCZ1	AA		C	Wire band
22	PGLSP0092FCZZ	AV		B	Glass
23	XHBSD40P08000	AA		C	Screw (4×8)
25	PGUMS0228FCZZ	AA		C	Table glass rubber
26	PGUMS0273FCZZ	AB		C	Glass rubber [except AR-505]
	PGUMS0281FCZZ	AB	N	C	Glass rubber [AR-505]
27	PSHEP4547FCZZ	AB		C	AC harness protect sheet
28	PGUMS0147FCZZ	AA		C	Table glass rubber (small) [except AR-505]
29	PSHEZ4513FCZZ	AB		C	Glass sheet
30	PCÖVP1513FCZZ	AG		C	LSU harness cover
31	DHAi-2865FC11	AS		C	LSU interface harness N [AR-280,285,335]
	DHAi-3062FCZZ	AT		C	LSU interface harness N [except AR-280,285,335,505]
	DHAi-3113FCZZ	AS	N	C	LSU interface harness N [AR-505]
32	LHLDW1019FCZZ	AB		C	Wire holder (WS-2NSL)
34	RCÖRF0030FCZZ	AM		C	Ferrite core (ZCAT2032093)
35	RCÖRF0015FCZZ	AK		C	Ferrite core
36	PSHEZ4513FCZZ	AB		C	Glass sheet [except AR-505]
	PSHEZ4771FCZZ	AB	N	C	Glass sheet [AR-505]
37	DHAi-2970FCZZ	AP		C	Operation interface harness
38	RCÖRF0032FCZZ	AL		C	Ferrite core
39	DHAi-2824FCZZ	BB		C	ADF interface harness [except AR-505]
	DHAi-3109FCZZ	AQ	N	C	ADF interface harness [AR-505]
40	LPLTM5488FCZZ	AE		C	Connector fixing plate A [except AR-505]
	LPLTM5488FCZ1	AD	N	C	Connector fixing plate A [AR-505]
41	XHBSD30P08000	AA		C	Screw (3×8)
42	LHLDW1057FCZZ	AB		C	Wire holder (LWS-3S)
43	VHPGP1A22LC-1	AK		B	Photo sensor (GP1A22LC)
44	XBBS40P10000	AA		C	Screw (4×10)
45	LPLTM5427FCZZ	AG		C	Motor drive fixing plate
46	XBPSD30P06000	AA		C	Screw (3×6)
47	CPWBF1279FC52	BD		E	Scanner drive PWB
51	VHi32MSiMM/-1	CA		B	IC (32MSiMM) [AR-250]
	VHi16MSiMM/-1	CB		B	IC (16MSiMM) [except AR-250,505]
52	PGiDH1793FCZZ	AG		C	ICU sub PWB guide R (Except Australia,Europe,Russia,Taiwan,South Africa)
	CPWBN1326FC51	DE		E	ICU PWB [AR-280,285]
	CPWBN1325FC52	DE		E	ICU PWB [AR-335]
	CPWBN1406FC51	DD		E	ICU PWB [AR-250]
	CPWBN1404FC51	DB		E	ICU PWB [AR-281,286]
	CPWBN1392FC53	DC		E	ICU PWB [AR-336]
	CPWBN1393FC51	DC		E	ICU PWB (Australia,Europe,Russia,Taiwan,South Africa)[AR-405]
	CPWBN1392FC52	DC		E	ICU PWB (Other countries)[AR-405]
	CPWBN1414FC51	DD	N	E	ICU PWB [AR-505]
54	LX-BZ0222FCZZ	AA		C	Screw (Australia,Europe,Russia,Taiwan,South Africa)
	LX-BZ0465FCZZ	AA		C	Screw (4×6) (Except Australia,Europe,Russia,Taiwan,South Africa)
55	LPLTM5426FCZZ	AG		C	ICU sub PWB fixing plate (Except Australia,Europe,Russia,Taiwan,South Africa)
56	LPLTM5485FCZZ	AE		C	ICU assistance plate
57	PGSK-2016HCZZ	AR		C	Gasket (UC-300285 L=110) (Except Australia,Europe,Russia,Taiwan,South Africa)
58	PGiDH1792FCZZ	AF		C	ICU sub PWB guide F (AR-405:Except Australia,Europe,Russia,Taiwan,South Africa,AR-505:All)
61	DHAi-2924FCZZ	AY		C	ICU.HD interface harness
62	DHAi-2867FCZZ	AW		C	HDD interface harness [except AR-250]
63	XHBSE40P08000	AA		C	Screw (4×8) [except AR-250]
64	CPLTM5431FC03	AS		C	HD fixing plate
65	PCUSS1021LCZZ	AC		C	HDD cushion [except AR-250]
66	LX-BZ1022LCZZ	AB		C	Screw [except AR-250]
67	DUNT-7014FCZZ	CF		E	Hard disk (USA,Canada,Europe,Australia)[except AR-250,405,505]
	DUNT-6927FCZZ	CK		E	Hard disk (Other countries)[except AR-250,405,505]

5 Optical unit 1






# 6 Optical unit 2

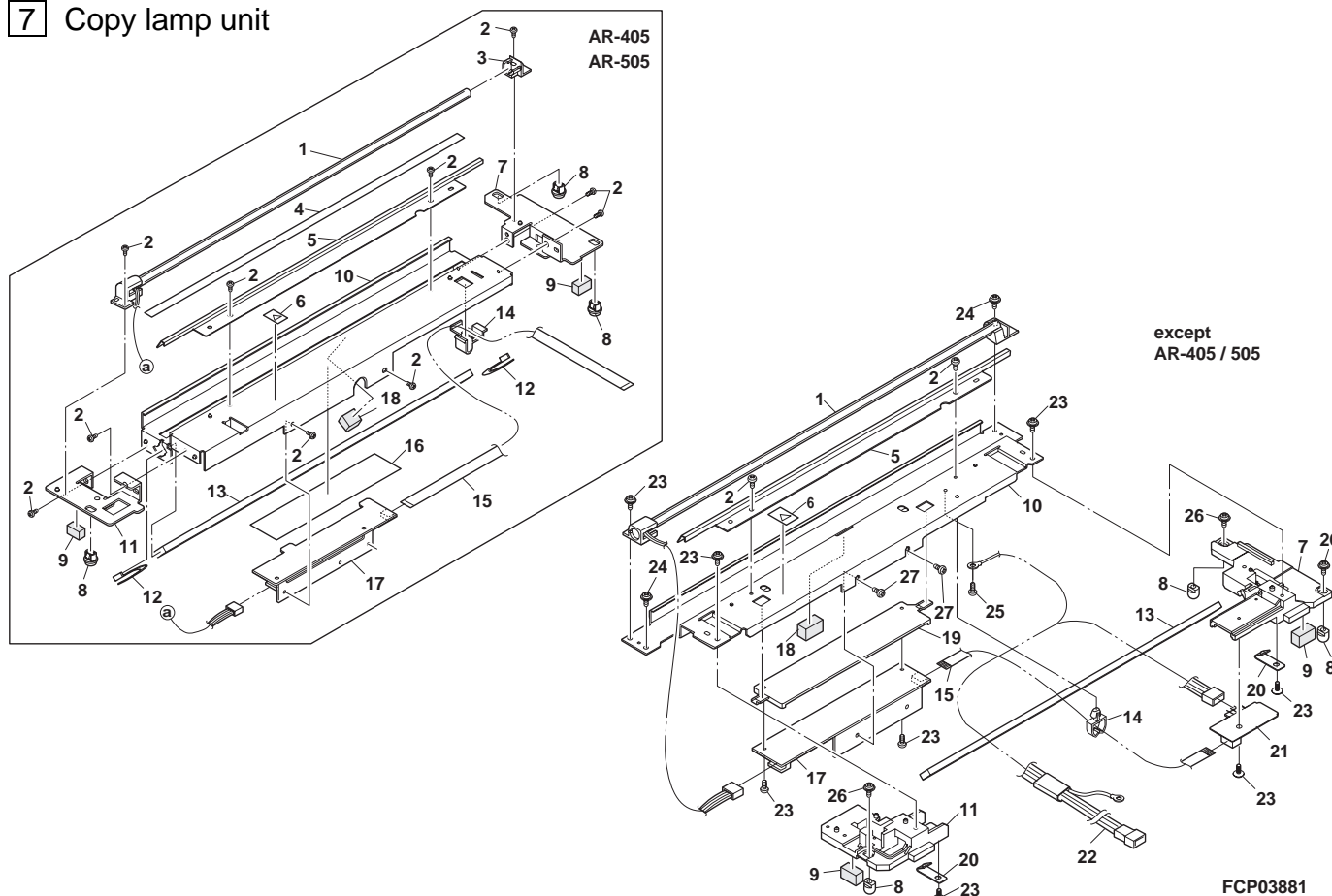




# 7 Copy lamp unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	RLMPD0619FCZZ	BL		B	Fluorescent lamp [AR-280,285,335]
	RLMPD0638FCZZ	BL		B	Fluorescent lamp [except AR-280,285,335]
2	XHBSD30P06000	AA		C	Screw (3×6)
3	LHLDZ1417FCZZ	AD		C	Lamp holder
4	PSHEP4684FCZZ	AC		C	Lamp sheet
5	PREFL0172FCZZ	AK		C	Copy lamp reflector [AR-405,505]
	PREFL0168FCZZ	AP		C	Copy lamp reflector [except AR-405,505]
6	TLABZ4335FCZZ	AB		C	HV caution label
7	LPLTM5636FCZZ	AG		C	Support plate R [AR-405,505]
	LPLTP5473FCZZ	AL		C	Side plate R [except AR-405,505]
8	MSLi-0138FCZZ	AC		C	Slider [AR-405,505]
	CSLi-0057FC32	AF		E	Slider unit (4PCS/SET) [except AR-405,505]
9	PCUSU0203FCZZ	AE		C	Cushion
10	LDAiU0604FCZZ	AM		C	Base [AR-405,505]
	LDAiU0587FCZZ	AQ		C	Base [except AR-405,505]
11	LPLTM5635FCZ1	AG		C	Support plate F [AR-405,505]
	LPLTP5472FCZZ	AK		C	Side plate F [except AR-405,505]
12	LFiX-0284FCZZ	AC		C	Mirror fixing plate
13	PMiR-0159FCZZ	AS		B	1st mirror [AR-405,505]
	PMiR-0156FCZZ	AS		B	1st mirror [except AR-405,505]
14	LHLDW1418FCZZ	AC		C	CL lead harness holder [AR-405,505]
	LHLDW1388FCZZ	AF		C	Mini clamp [except AR-405,505]
15	DHAi-3037FCZZ	AG		C	CL lead harness [AR-405,505]
	DHAi-2912FC11	AW		C	Interface harness [except AR-405,505]
16	PSHEP4682FCZZ	AE		C	Protective sheet
17	CPWBF1370FC31	BK		E	Inverter PWB [AR-405,505]
	CPWBF1307FC32	BK		E	Inverter PWB [except AR-405,505]
18	PCUSF0334FCZZ	AP		C	Mirror cushion
19	LHLDZ1387FCZZ	AH		C	Insulator holder [except AR-405,505]
20	MSPRP2101FCZZ	AC		C	Mirror spring [except AR-405,505]
21	CPWBF1308FC31	AR		E	Interface PWB [except AR-405,505]
22	DHAi-2912FCZZ	AW		C	CL harness [except AR-405,505]
23	XEBSF30P06000	AA		C	Screw (3×6) [except AR-405,505]
24	XHBSD30P08000	AA		C	Screw (3×6) [except AR-405,505]
25	XBPSD30P05000	AA		C	Screw (3×6K) [except AR-405,505]
26	XEBSF30P05000	AA		C	Screw (3×5) [except AR-405,505]
27	XBPSD30P06KS0	AA		C	Screw (3×6) [except AR-405,505]
(Unit)					
901	CREFL0168FC32	BR		E	Copy lamp unit [except AR-405,505]
	CREFL0172FC31	BQ		E	Copy lamp unit [AR-405,505]

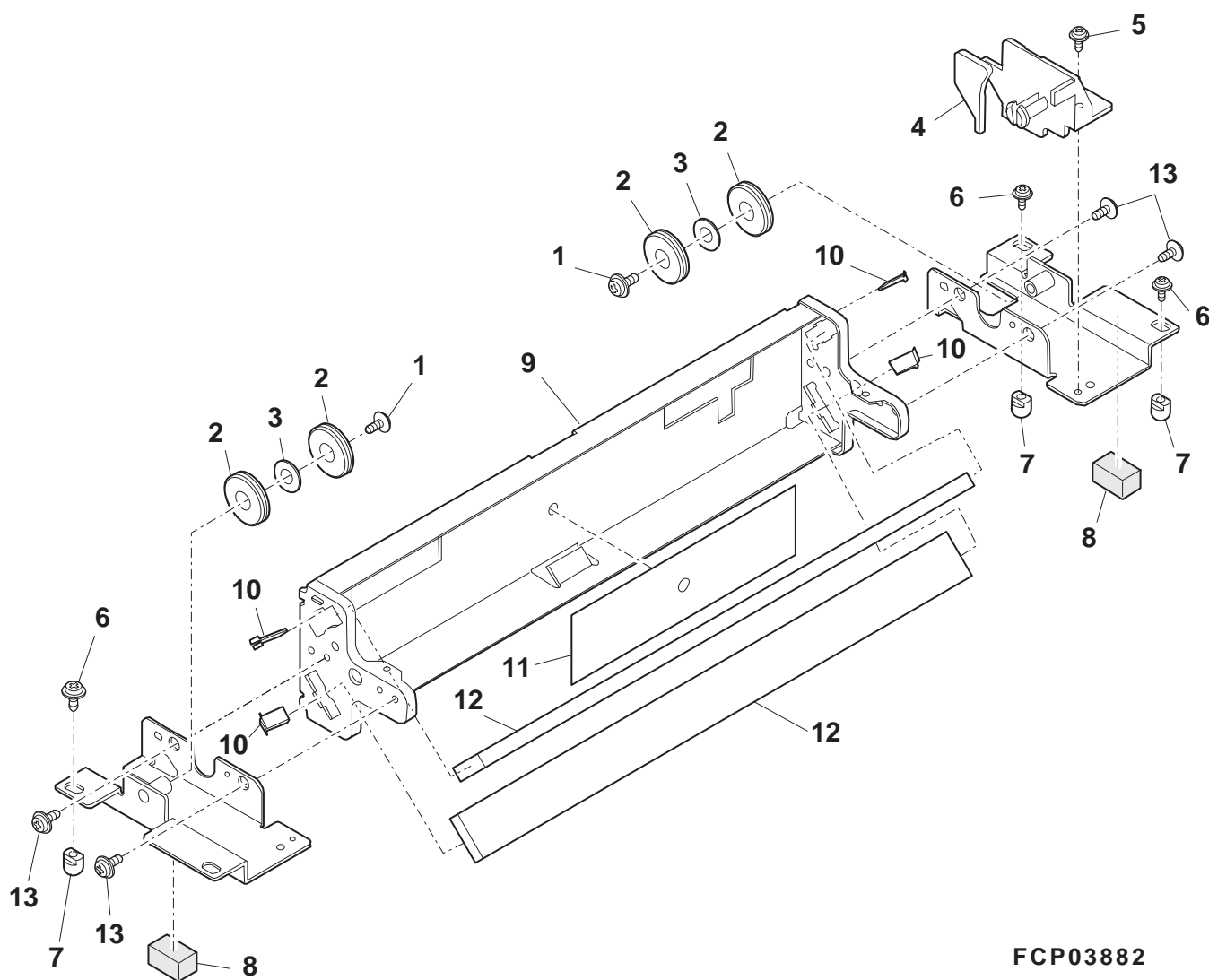
# 7 Copy lamp unit



# 8 2nd,3rd mirror holder unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LX-BZ0618FCZZ	AA		C	Screw (4×4)(Black)
2	NPLYZ0167FCZZ	AF		C	Pulley
3	LX-WZ1003HCZZ	AA		C	Washer (8.2×11×0.5)
4	LHLDZ1318FCZZ	AK		C	CL pulley holder
5	XHBSD30P08000	AA		C	Screw (3×8)
6	XEPSD40P06000	AA		C	Screw (4×6)
7	CSLi-0103FC31	AF		E	Slider (4pcs/set)
8	PCUSS0201FCZZ	AA		C	MB-B cushion
9	LHLDZ1382FCZZ	AR		C	2nd,3rd mirror holder
10	LFiX-0284FCZZ	AC		C	4th 5th mirror fixing plate F
11	PSHEZ4530FCZZ	AD		C	Holder sheet
12	PMiR-0155FCZZ	AP		B	2nd,3rd mirror
13	LX-BZ0335FCZZ	AA		C	Screw (4×6)(Red)
(Unit)					
901	CHLDZ1382FC31	BF		E	2nd,3rd mirror holder unit

# 8 2nd,3rd mirror holder unit



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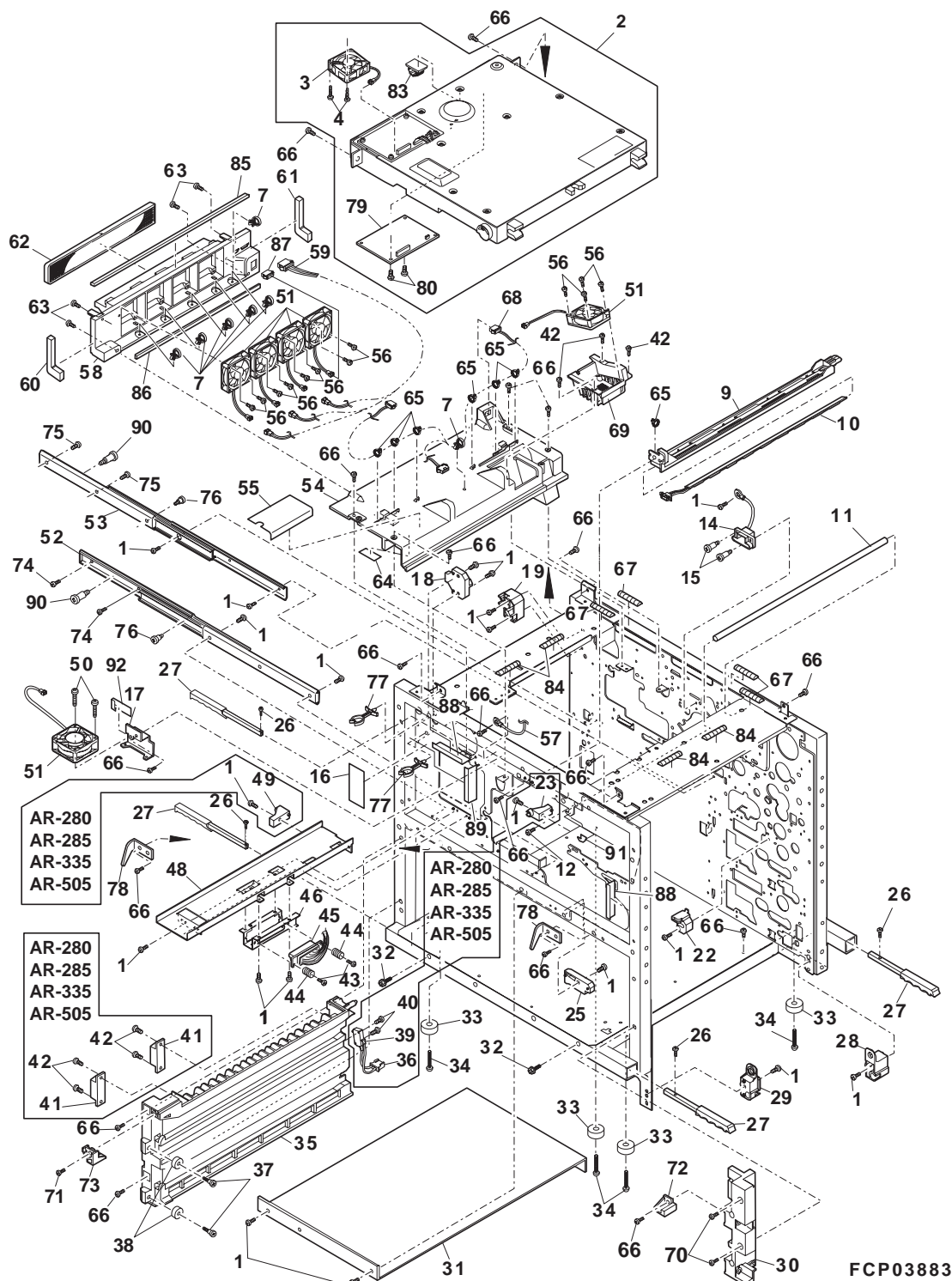
## 9 Frame section

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XHBSE40P08000	AA		C	Screw (4×8)
2	DUNT-6984FC22	CL		E	LSU unit [AR-280,285,335]
	DUNT-6984FC21	CN		E	LSU unit [AR-250,281,286,336]
	DUNT-6984FC20	CT		E	LSU unit [AR-405]
	DUNT-6984FC30	CU	N	E	LSU unit [AR-505]
3	NFANP0053FCZZ	BA		B	LSU fan motor
4	XBPSD30P18KS0	AA		C	Screw (3×18KS)
7	LBNDJ0043FCZ1	AA		C	Snap band
9	LHLDZ1368FCZZ	AL		C	DL holder
10	CPWBF1098FC31	AY		E	DL PWB
11	NSFTZ2501FCZZ	AR		C	LSU holder shaft
12	XBPSD40P08KS0	AA		C	Screw (4×8KS)
14	DHAI-2822FCZZ	AS		C	Process interface harness
15	LX-BZ0843FCZZ	AC		C	Screw
16	PSHEP4666FCZZ	AC		C	Harness protect sheet
17	LPLTM5601FCZZ	AG		C	Fan fixing plate F
18	LDAIU0582FCZZ	AE		C	Delivery control base F
19	LDAIU0583FCZZ	AE		C	Delivery control base R
22	LDAIU0580FCZZ	AE		C	ADU control base R
23	MHNG-0203FCZZ	AD		C	Delivery exterior hinge R [AR-280,285,335,505]
24	LRALM0149FCZZ	AG		C	Suction rail F
25	LDAIU0581FCZZ	AE		C	ADU control base F
26	LX-BZ0841FCZZ	AD		C	Handle fixing screw
27	JHNDG0151FCZZ	AK		C	Base plate handle
28	LHLDZ1364FCZZ	AD		C	Right door fulcrum holder R
29	LHLDZ1363FCZZ	AD		C	Right door fulcrum holder F
30	CRALP0161FC01	AT		C	Tray rail R
31	LPLTM5463FCZZ	AS		C	Invoice plate
32	XXHUW40L30000	AD		C	Screw (4×30)
33	PGUMS0182FCZZ	AC		C	Rubber foot
34	XBBSD50P16000	AB		C	Screw (5×16)
35	LRALP0160FCZZ	BA		C	Tray rail L
36	DHAI-2844FCZZ	AF		C	DSWL interface harness [except AR-405]
37	LX-BZ0837FCZZ	AC		C	Screw
38	PCLR-0441FCZZ	AK		C	collar
39	QSW-M0319FCZZ	AG		B	Door switch [AR-280,285,335,505]
40	XEBSD30P16000	AA		C	Screw (3×16) [AR-280,285,335,505]
41	PMAGT0072FCZZ	AF		B	Magnet catch [AR-280,285,335,505]
42	XEBSD30P10000	AA		C	Screw (3×10) [AR-280,285,335,505]
43	LX-BZ0510FCZZ	AB		C	Screw
44	MSPRC2662FCZZ	AB		C	Drawer spring
45	DHAI-2875FCZZ	BC		C	Delivery interface harness
46	LPLTM5609FCZZ	AF		C	Delivery connector fixing plate
48	LRALM0147FCZZ	AQ		C	Fusing rail
49	MHNG-0202FCZZ	AD		C	Delivery exterior hinge F [AR-280,285,335,505]
50	XBPSD40P30000	AA		C	Screw (4×30)
51	NFANP0047FCZZ	AY		B	Fan (60X25P) [AR-280,285,335]
	NFANP0060FCZZ	AX		B	Fan (60X25μ) [except AR-280,285,335]
52	MSLI-0132FCZZ	AX		C	Delivery turnover slider F
53	MSLI-0133FCZZ	AX		C	Delivery turnover slider R
54	PDUC-0148FCZZ	AW		D	Main duct 1
55	PSHEZ4605FCZZ	AK		C	Duct sheet
56	XEPSD40P35000	AA		C	Screw (4×35)
57	DHAI-2949FCZZ	AF		C	Operation ESDFG harness
58	PDUC-0149FCZZ	AR		D	Main duct 2
59	DHAI-2896FC11	AY		C	VFM interface harness
60	PSEL-0764FCZZ	AE		C	Duct seal F
61	PSEL-0765FCZZ	AE		C	Duct seal R
62	PFILZ0265FCZ1	BA		B	Ozone filter
63	XEBSD40P16000	AA		C	Screw (4×16)
64	PSHEP4655FCZZ	AC		C	Duct lower sheet
65	LBNDJ0013FCZ1	AA		C	Wire band
66	XHBSE40P08000	AA		C	Screw (4×8)
67	MSPRP2411FCZZ	AS		C	Mother board finger (975400217)
68	DHAI-3024FCZZ	AT		C	Main duct harness
69	PDUC-0151FCZZ	AG		D	Sub duct
70	XHBSE40P14000	AA		C	Screw (4×14)
71	XEBSE40P14000	AA		C	Screw (4×14)
72	LSTPP0344FCZZ	AC		C	Tray stopper right
73	LSTPP0345FCZZ	AC		C	Tray stopper left
74	XBBSD40P06000	AA		C	Screw for 2 bin delivery turnover unit (4×6)
75	XBBSD40P20000	AA		C	Screw for 2 bin delivery turnover unit (4×20)
76	LX-BZ0156FCZZ	AA		C	Screw [AR-250,280,281]
77	LHLDW1061FCZZ	AB		C	Harness holder (HL-18-0)
78	MHNG-0200FCZZ	AE		C	Front exterior hinge
79	CPWBF1378FC51	AZ		E	Clock PWB [except AR-405,505]
	CPWBN1318FC52	BQ		E	LSU control PWB [AR-405]
	CPWBN1418FC51	BR	N	E	LSU control PWB [AR-505]
80	XEBSD30P08000	AA		C	Screw (3×8)
83	LHLDW2341RCZZ	AB		C	Locking wire holder (CKN-05)

# 9 Frame section

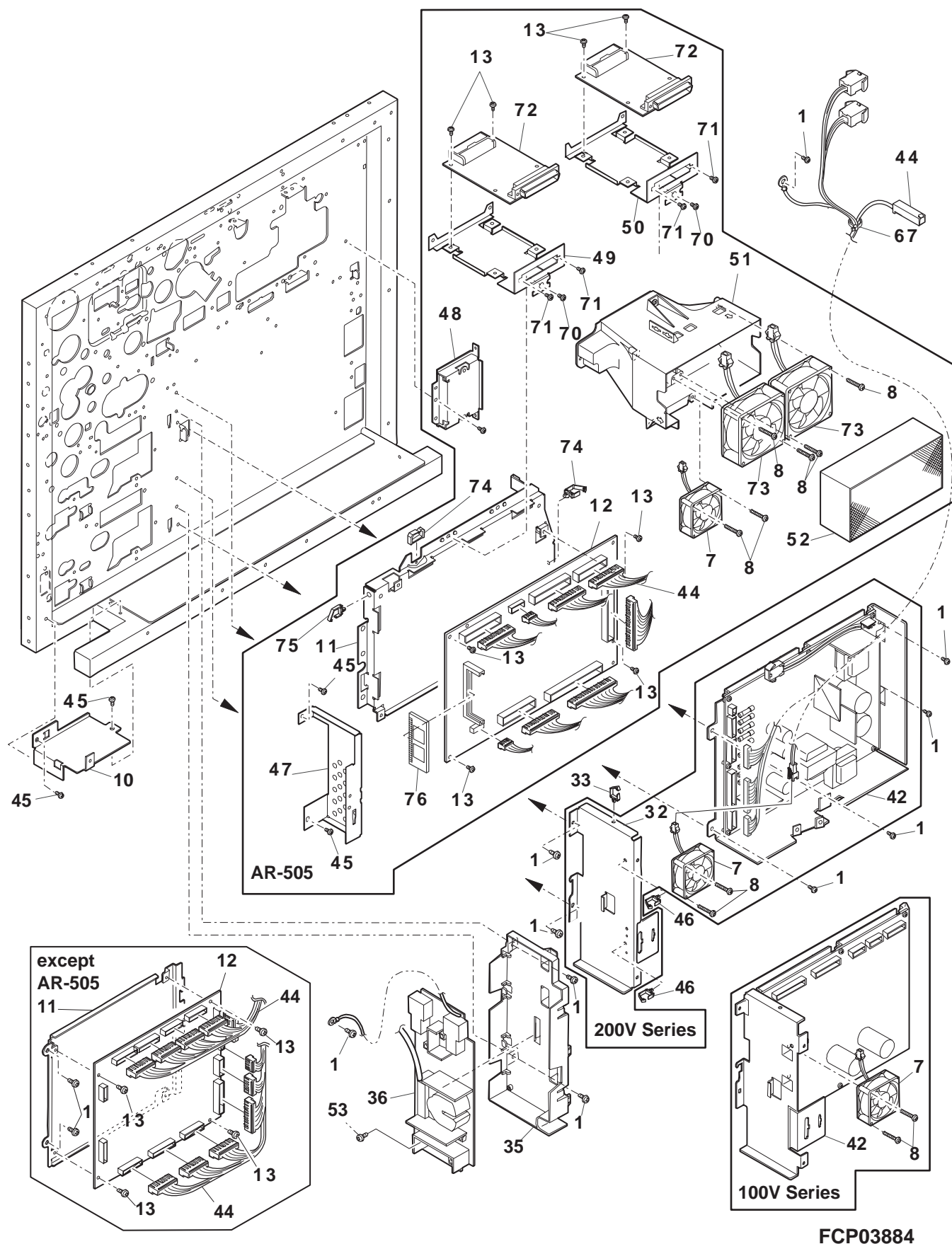
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
84	LPLTP1015ACZZ	AH		C	Earth band
85	PSHEZ4629FCZZ	AC		C	Duct protect sheet
86	PSHEZ4656FCZZ	AC		C	Duct protect sheet 2
87	QCNCM1000FCZZ	AC		C	Connector (BU3P-TR-P-H)
88	PSHEP4720FCZZ	AD		C	Sheet (50)
89	PSHEP4721FCZZ	AD		C	Sheet (100)
90	LX-BZ0684FCZZ	AB		C	ADU fixing screw
91	PSHEP4672FCZZ	AC		C	Process guide sheet
92	PSHEZ4668FCZZ	AC		C	Protection sheet

# 9 Frame section





# 10 Rear frame 1(PCU PWB,DC power PWB etc.)



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## 11 Rear frame 1(AC PWB,Frame etc)

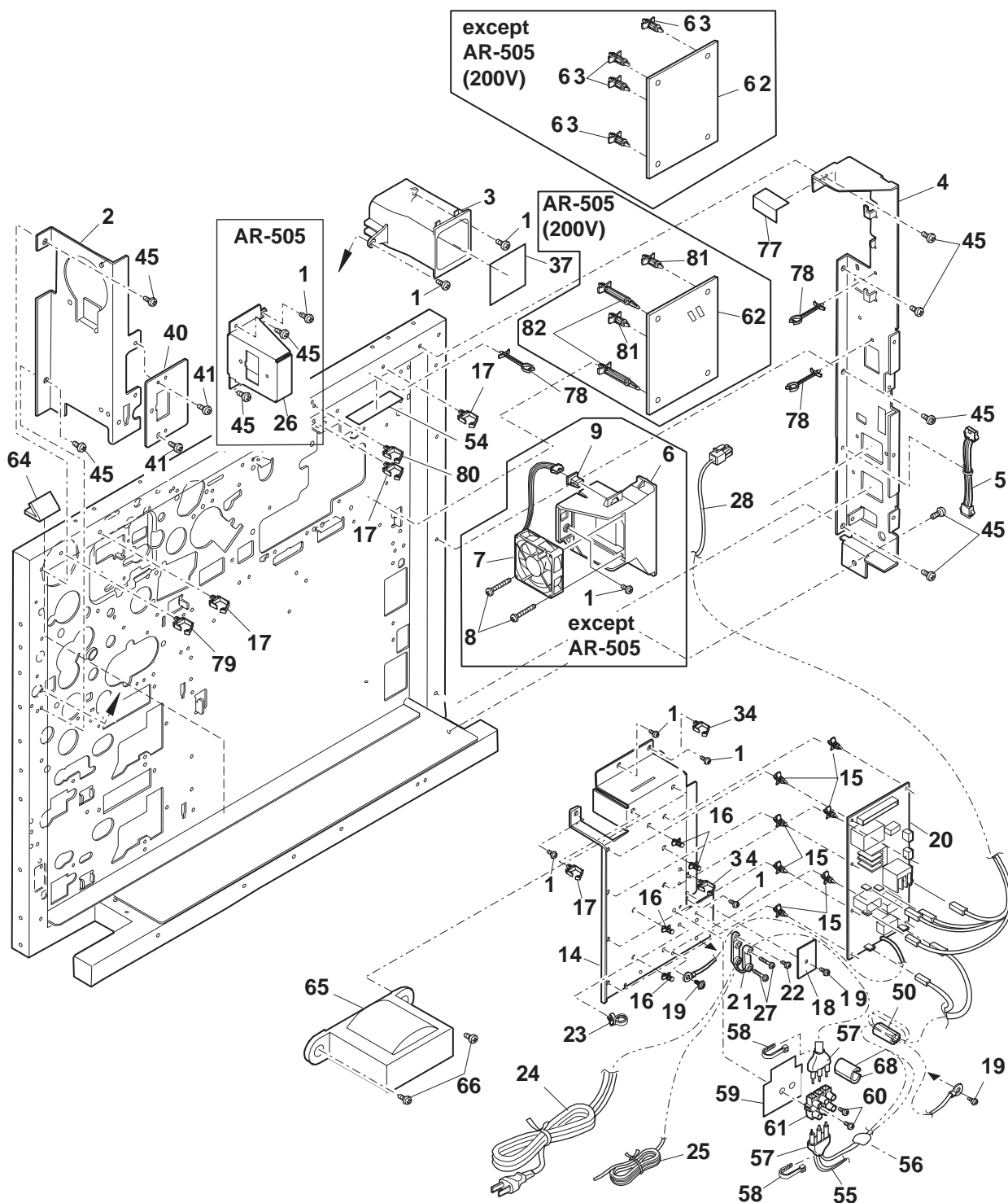
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XHBSE40P08000	AA		C	Screw (4×8)
2	LFRM-0938FCZZ	AL		C	Frame R
3	PDUC-0147FCZZ	AH		D	Duct 1
5	DHAI-2898FCZZ	AF		C	DSWLL harness [AR-280,285,335,505]
6	PDUC-0150FCZZ	AL		D	Duct
7	NFANP0048FCZZ	AY		B	Fan (60X20P)
8	XEPSD40P30000	AA		C	Screw (4×30)
9	QCNCM0999FCZZ	AC		C	Connector (BU02P-TR-PH)
12	CPWBN1267FC53	CB		E	PCU PWB [except AR-505]
	CPWBN1415FC51	CB	N	E	PCU PWB [AR-505]
14	LPLTM5398FCZ1	AR		C	AC PWB fixing plate (100V series)[AR-280,285,335]
	LPLTM5655FCZZ	AQ		C	AC PWB fixing plate (100V series)[except AR-280,285,335]
	LPLTM5398FCZ1	AR		C	AC PWB fixing plate (200V series)
15	LSUPP0060FCZZ	AA		C	PWB supporter (SPLS-6)
16	LSUPP0076FCZZ	AA		C	PWB supporter (SPS-6)
17	LHLDW1264FCZZ	AD		C	Wire holder (LWS-8S-2.5W) [except AR-505]
18	PSHEP4529FCZZ	AD		C	AC sheet (200V series)
19	XBPSD40P06K00	AA		C	Screw (4×6K)
20	CPWBF1290FC51	BN		E	AC PWB (100V series)[AR-280,285,335]
	CPWBF1306FC51	BS		E	AC PWB (Taiwan only)[AR-280,285,335]
	CPWBF1395FC51	BQ		E	AC PWB (100V series)[except AR-280,285,335,505]
	CPWBF1395FC52	BM	N	E	AC PWB (100V series)[AR-505]
	CPWBF1291FC51	BR		E	AC PWB (200V series)[except AR-505]
	CPWBF1291FC52	BR	N	E	AC PWB (200V series)[AR-505]
21	LFIX-0084FCZZ	AC		C	AC cord holder (120V/127V) (100V series)
	LFIX-0016FCZZ	AD		C	AC cord holder (200V series)
22	XBPSD40P08KS0	AA		C	Screw (4×8KS)
23	LBNDJ0043FCZ1	AA		C	Snap band
	DHAI-2903FC20	AT		B	AC cord (Taiwan)[AR-280,285,335]
	DHAI-2903FCZZ	AX		B	AC cord ?SF(Taiwan)[except AR-280,285,335,405,505]
	DHAI-2903FC11	AY		B	AC cord (USA,CANADA,Brazil)[AR-280,285,335]
	DHAI-2903FC31	AX	N	B	AC cord (USA,Canada,Brazil)(100V series)[AR-505]
	DHAI-2903FC21	AY		B	AC cord (USA,Canada,Brazil)[except AR-280,285,335,505]
24	QACCL8421QCN1	AX		B	AC cord (Australia)
	QPLGA4171CCZZ	AN		B	AC cord plug (South Africa,Hong Kong)
	QACCE7422QCZZ	BB		B	AC cord (U.Kingdom,Saudi Arabia)
	DHAI-2903FC22	BC		B	AC cord (Saudi Arabia)[except AR-280,285,335]
	DHAI-2903FC16	BC		B	AC cord (Saudi Arabia)[AR-280,285,335]
	QACCV6420QCN2	AU		B	AC cord (Europe,Russia,Singapore,Malaysia)
	QPLGA0003QCZZ	AN		B	AC cord plug (Singapore,Malaysia)
	QCNW-0001QCZZ	AN		C	AC Wire (South Africa,Hong Kong,Singapore,Malaysia)
	PHOG-1023CCZZ	AB		C	AC plug protector (South Africa,Sri Lanka,Hong Kong,India)
	QPLGA0001QCZZ	AN		B	AC cord plug (Technolarco only)
	QACCJ3410QCZZ	AS		B	AC cord (Other countries)
25	DHAI-2904FCZZ	AN		C	Earth core (Taiwan)
26	LPLTM5675FCZZ	AF	N	C	Connector fixing plate [AR-505]
27	XBPSD40P25XS0	AA		C	Screw (4×25XS) (120V/127V)
	XBPSD40P20XS0	AA		C	Screw (4×20XS) (Except 120V/127V)
	DHAI-2952FC11	BH		C	AC harness (100V series)[AR-280,285,335]
	DHAI-3097FCZZ	BK		C	AC harness (100V series)[AR-250,281,286,336]
	DHAI-3068FCZZ	BK		C	AC harness (100V series)[AR-405]
	DHAI-3100FCZZ	BA	N	C	AC harness (100V series)[AR-505]
	DHAI-2959FC11	BK		C	AC harness (200V series)[AR-280,285,335]
	DHAI-2959FC12	BK		C	AC harness (200V series)[AR-250,281,286,336]
	DHAI-3069FCZZ	BA		C	AC harness (200V series)[AR-405]
	DHAI-3101FCZZ	BA	N	C	AC harness (200V series)[AR-505]
	DHAI-3089FCZZ	BG		C	AC harness (Taiwan only)[AR-280,285,335]
	DHAI-3098FCZZ	BK		C	AC harness (Taiwan only)[AR-250,281,286,336]
	DHAI-3092FCZZ	BL		C	AC harness (Taiwan only)[AR-405,505]
34	LHLDW2106SCZZ	AB		C	Wire holder (WS-2WS) (AR-405,505:200V series)
37	PFLD0263FCZZ	AL		B	Filter
40	LPLTM5489FCZZ	AE		C	Connector fixing plate B
41	XHBSE30P06000	AA		C	SCrew (3×6)
45	XHBSE40P08000	AA		C	Screw (4×8)
50	RCORF0031FCZZ	AT		C	Ferrite core (ZCAT3035133) (100V series)
54	PSHEP4720FCZZ	AD		C	Edge protective sheet (50)
55	DHAI-2854FC11	AL		C	3P terminal base harness (200V series)
56	RCILF0104FCZZ	AS	N	C	Earth inductor coil (200V series)
57	PHOG-0346FCZZ	AB		C	3P terminal base cover (200V series)
58	LBNDJ0013FCZ1	AA		C	Wire band (200V series)
59	PSHEP1804FCZZ	AB		C	3P terminal protect sheet (200V series)
60	XBPSD30P14000	AA		C	Screw (3×14) (200V series)
61	QTANN0015FCZZ	AG		C	3P terminal base (200V series)
62	CPWBF1364FC51	AX		E	Filter PWB (Australia,Europe,Russia,Taiwan,South Africa)
63	LSUPP0060FCZZ	AA		C	PWB supporter (Australia,Europe,Russia,Taiwan,South Africa)[except AR-505]
64	PGSK-0028FCZZ	AF		C	Gasket (Australia,Europe,Russia,Taiwan,South Africa)
65	RCILF0099FCZZ	AY		C	Reactor coil (Australia,Europe,Russia,Taiwan,South Africa)
66	XHBSE40P08000	AA		C	Screw (4×8) (Australia,Europe,Russia,Taiwan,South Africa)
68	RCORF1039LCZZ	AN		C	Ferrite core (SFC3PU) (200V series)
77	PSHEP4786FCZZ	AD	N	C	Protect sheet



# 11 Rear frame 1(AC PWB,Frame etc)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
78	LHLDW1061FCZZ	AB		C	Holder (HL-18-0) [AR-505]
79	LHLDW1264FCZZ	AD		C	Wire holder (LWS-8S-2.5W) [AR-505]
80	LHLDW1264FCZZ	AD		C	Wire holder (LWS-8S-2.5W)
81	LSUPP0115FCZZ	AB		C	PWB supporter,short (SPLSN3)(Australia,Europe,Russia,Taiwan,South Africa)[AR-505]
82	LSUPP0112FCZZ	AC		C	PWB supporter,long (SPLS-14)(Australia,Europe,Russia,Taiwan,South Africa)[AR-505]

# 11 Rear frame 1(AC PWB,Frame etc)

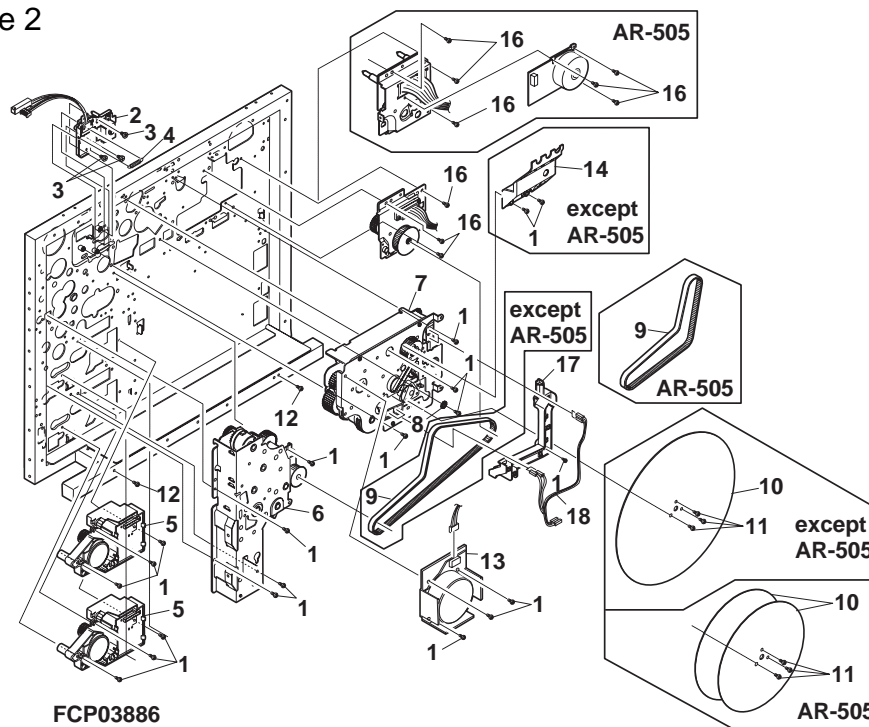




## 12 Rear frame 2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XHBSE40P08000	AA		C	Screw (4×8)
2	CFRM-0943FC51	AZ	N	E	DV drive unit [except AR-405,505]
	CFRM-0943FC52	AZ	N	E	DV drive unit [AR-405,505]
3	LX-BZ0581FCZZ	AB		C	Screw
4	MSPRC2617FCZZ	AC		C	DV tension spring
5	CDAiU0577FC31	BE		E	Lift up unit
6	CFRM-0945FC31	BV		E	Paper feeding drive unit [except AR-405,505]
	CFRM-0945FC33	BU		E	Paper feeding drive unit [AR-405]
	CFRM-0945FC34	BW	N	E	Paper feeding drive unit [AR-505]
	CFRM-0939FC53	BT		E	Main drive unit [except AR-405,505]
7	CFRM-0939FC54	BT		E	Main drive unit [AR-405]
	CFRM-0939FC55	BU	N	E	Main drive unit [AR-505]
8	XWVSD40-05000	AA		C	Washer
9	NBLTH0323FCZZ	AK		B	Main belt [except AR-505]
	NBLTH0325FCZZ	AK	N	B	Belt [AR-505]
10	NFLY-0007FCZZ	AQ		C	Flay wheel
11	XBPSD40P14K00	AA		C	Screw (4×14K)
12	XXHUW40L30000	AD		C	Screw (4×30)
	RMÖTP0827FCZZ	BR		B	Main motor [except AR-405,505]
13	RMÖTP0849FCZZ	BR		B	Main motor [AR-405]
	RMÖTP0851FCZZ	BR	N	B	Main motor [AR-505]
14	PgiDM1827FCZZ	AH		C	Guide [except AR-505]
16	XHBSD40P08000	AA		C	Screw (4×8)
17	PgiDM1800FCZZ	AK		C	High voltage harness guide
18	DHAi-2827FCZZ	AL		C	HV harness

## 12 Rear frame 2



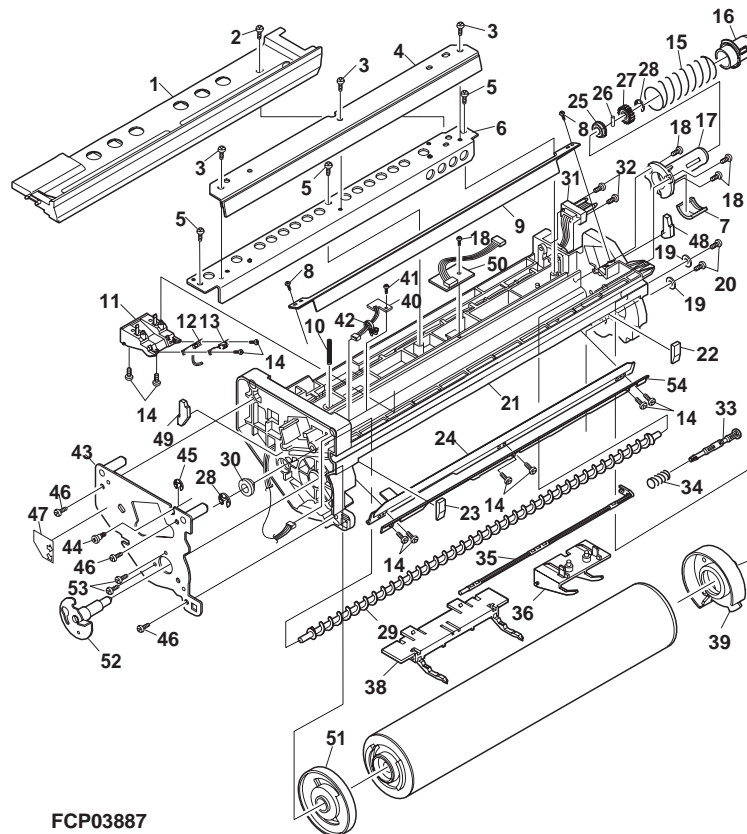
## 13 Photo conductor unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	PCÖVP1433FCZZ	AP		C	Process frame cover
2	XBBS240P08000	AB		C	Screw (4×8)
3	XBPS240P06000	AA		C	Screw (4×6)
4	UCLEZ0149FCZZ	AU		C	Blade
5	XEBSD40P08000	AA		C	Screw (4×8)
6	LSTYM0227FCZ1	AK		C	Blade stay
7	PMLT-1163FCZZ	AC		C	Waste toner pipe cushion
8	XEPSD30P06000	AA		C	Screw (3×6)
9	UCLEZ0151FCZ1	AS		C	Toner cleaner
10	MSPRC2622FCZZ	AB		C	Earth spring
11	LHLDZ1367FCZ1	AF		C	Sensor holder
12	CPWBF0976FC54	AR		E	ID PWB
13	PCÖVP1184FCZ1	AC		C	DR sensor cover
14	XEPSD30P08000	AA		C	Screw (3×8)
15	MSPRC2620FCZZ	AD		C	Shutter spring
16	PSHT-0074FCZZ	AF		C	Waste toner shutter
17	PPiPP0197FCZZ	AF		C	Waste toner pipe
18	XEBSD30P08000	AA		C	Screw (3×8)

### 13 Photo conductor unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
19	LX-WZ0066FCZZ	AA		C	Washer
20	LX-BZ0611FCZZ	AB		C	Screw
21	LFRM-0950FCZZ	AX		C	Process frame
22	PSEL-0750FCZ1	AG		C	Side seal R
23	PSEL-0749FCZ1	AG		C	Side seal F
24	LRALM0165FCZZ	AF		C	MC rail
25	NBRGP0322FCZZ	AC		C	Bearing MX
26	LPINS0297FCZZ	AB		C	Pin (φ2-6)
27	NGERH1074FCZZ	AD		C	Waste toner gear
28	XRESP40-06000	AA		C	E type ring
29	NSRW-0028FCZZ	AK		C	Waste toner screw
30	NBRGP0321FCZZ	AD		C	Bearing
31	DHAI-2833FCZZ	AT		C	Process harness
32	XEBSD30P10000	AA		C	Screw (3×10)
33	MLEVP0745FCZ1	AC		C	Pawl sub lever
34	MSPRC2623FCZZ	AB		C	Pawl lever spring
35	MLEVP0744FCZZ	AF		C	Pawl lever
36	PTME-0225FCZZ	AC		C	Separator pawl R
37	LX-WZ0310FCZZ	AB		C	Washer
38	CTME-0211FC33	AY		E	Separator pawl fixing plate unit [except AR-505]
	CTME-0211FC34	AZ	N	E	Separator pawl fixing plate unit [AR-505]
39	LPFTF0097FCZ1	AP		C	DSD flange R
40	CPWBF0975FC52	AR		E	DMS PWB
41	XCPSD20P05000	AA		C	Screw (2×5)
42	LBNDJ0043FCZ1	AA		C	Snap band
43	CPLTM5389FC01	AP		C	Process F plate
44	LX-BZ0656FCZZ	AD		C	Screw
45	XRESP50-06000	AA		C	E type ring
46	XEPSD40P08000	AA		C	Screw (4×8)
47	TCAUH1034FCZZ	AD		C	HV caution label
48	PMLT-1162FCZ1	AD		C	Side cushion R
49	PMLT-1161FCZ1	AD		C	Side cushion F
50	CPWBF1359FC51	BC		E	Thermister PWB
51	LPFTF0101FCZZ	AP		C	DSD flange FC
	CPLTM4027FC08	AV		C	Drum shaft fixing plate (Australia,Europe,Russia,South Africa,Saudi Arabia)[except AR-405,505]
52	CPLTM4027FC10	AT		C	Drum shaft fixing plate C (except Australia,Europe,Russia,South Africa,Saudi Arabia)[except AR-405,505]
	CPLTM5654FC01	AN		C	Drum shaft fixing plate C (Australia,Europe,Russia,South Africa,Saudi Arabia)[AR-405,505]
	CPLTM5654FC02	AN		C	Drum shaft fixing plate C(except Australia,Europe,Russia,South Africa,Saudi Arabia)[AR-405,505]
53	XBBS240P08000	AB		C	Screw (4×8)
54	UCLEZ0158FCZZ	AP		C	Toner holder sub blade

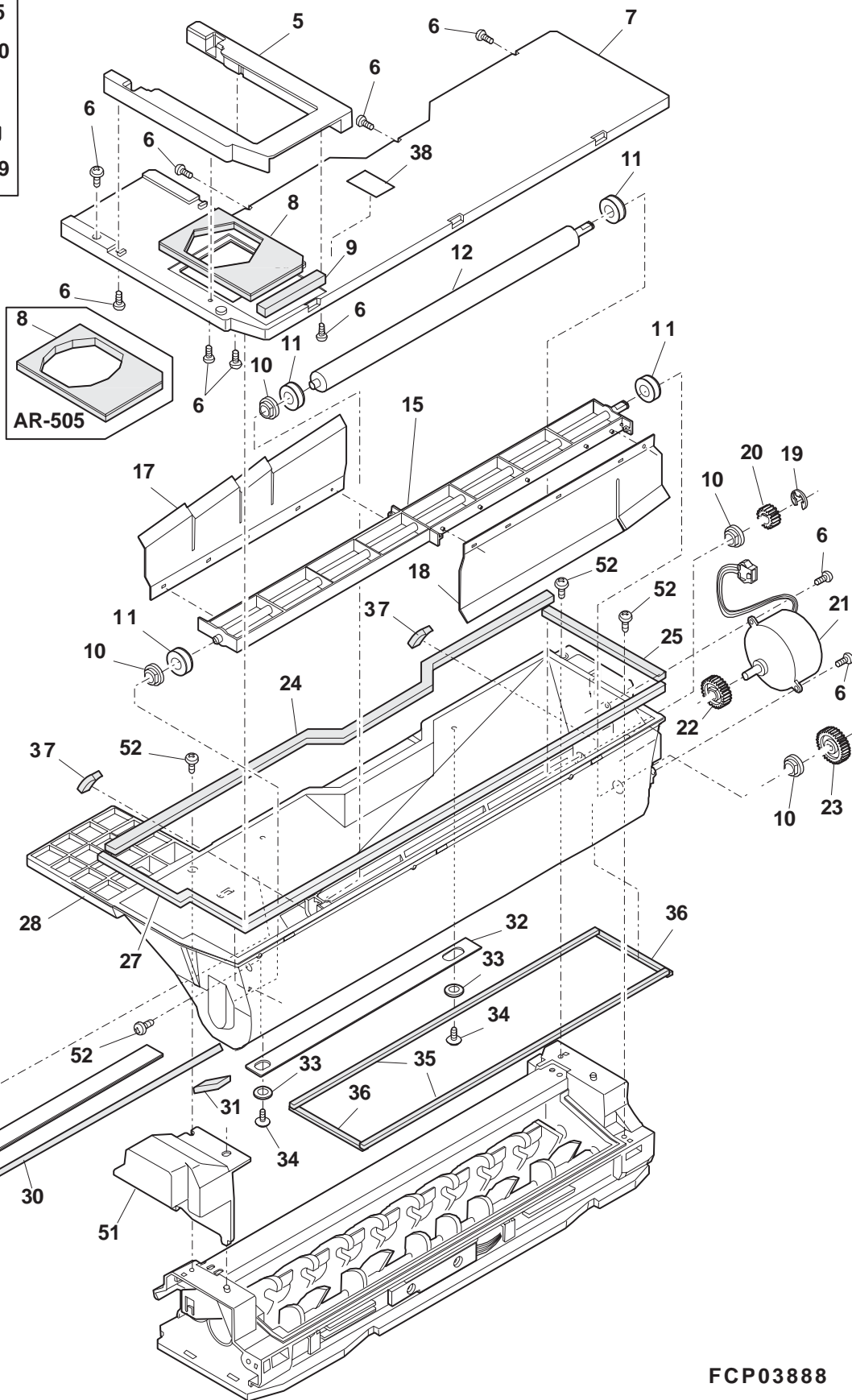
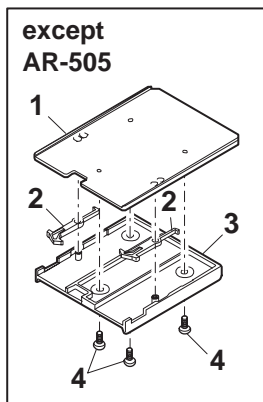
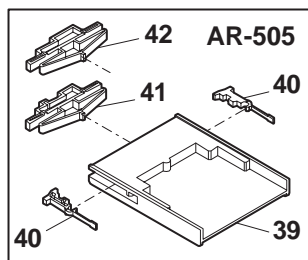
### 13 Photo conductor unit



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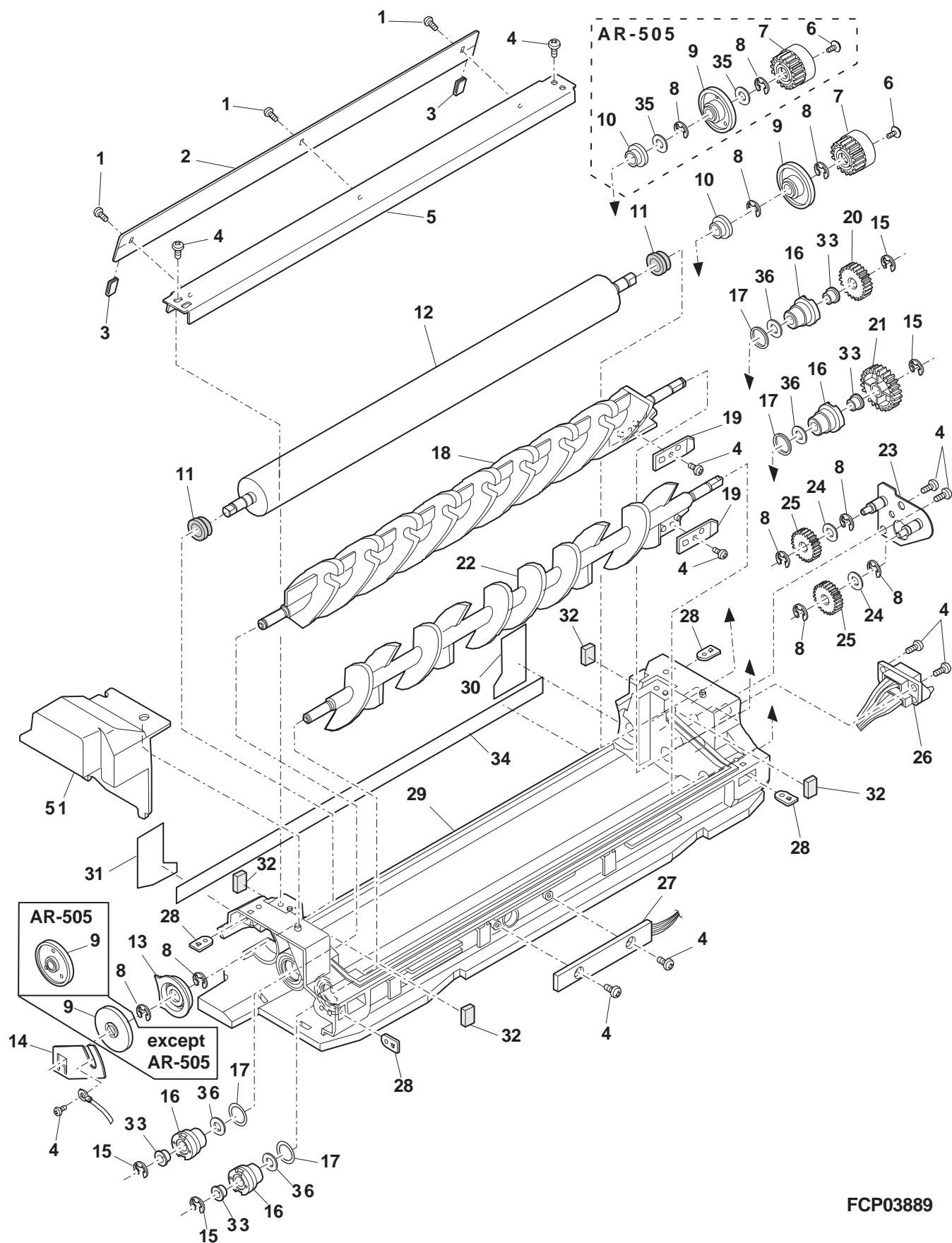
# 14 Toner hopper unit



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# 15 Developer unit



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## 16 Fusing unit 1

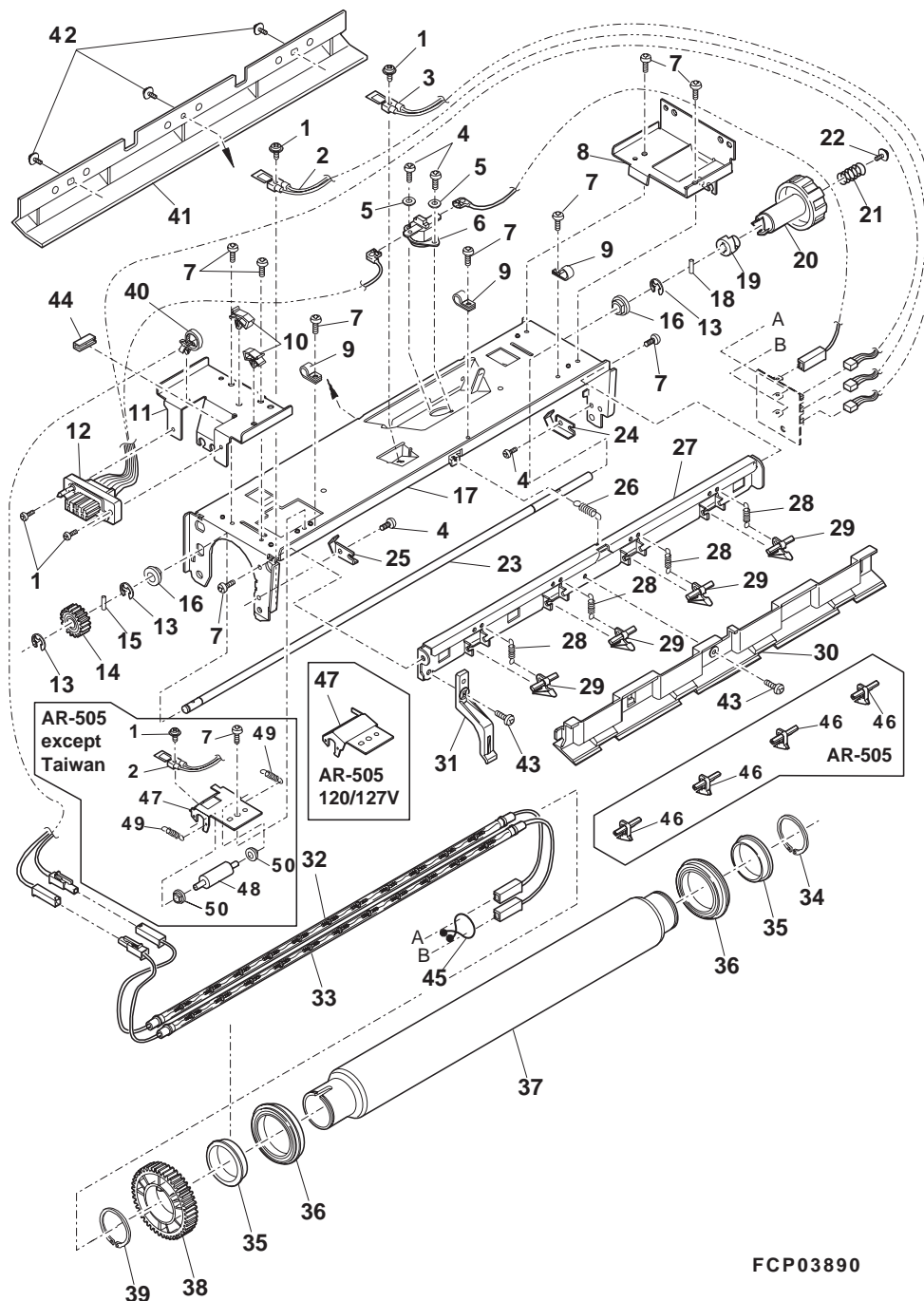
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XBPSD30P10KS0	AB		C	Screw (3×10KS)
2	RDTCT0135FCZZ	AR		B	Thermistor (Sub) [except AR-505]
	RDTCT0145FCZZ	AQ	N	B	Thermistor (Sub) [AR-505]
3	RDTCT0134FCZZ	AR		B	Thermistor (Main)
4	XBPSD30P04000	AA		C	Screw (3×4)
5	XWHSD30-05080	AA		C	Washer
6	RTHM-0014FCZZ	AM		B	Thermostat (100V/110V)
	RTHM-0009FCZZ	AK		B	Thermostat (Except 100V/110V)
7	XBBSD30P06000	AA		C	Screw (3×6)
8	LHLDZ1375FCZZ	AH		C	Lamp holder F
9	LHLDW0910FCZZ	AB		C	Heatproof holder
10	LHLDW7011XCZZ	AB		C	Holder (YMC-05-0)
11	LHLDZ1374FCZZ	AH		C	Lamp holder R
12	DHAi-2950FCZZ	BA		C	Fusing harness (120V/127V) (100V series)[AR-280,285,335]
	DHAi-2951FCZZ	BB		C	Fusing harness (200V series)[except AR-405,505]
	DHAi-2837FCZZ	BA		C	Fusing harness (100V/110V) (for Taiwan)[except AR-405,505]
	DHAi-3096FCZZ	BA		C	Fusing harness (120V/127V) (100V series)[AR-250,281,286,336]
	DHAi-3074FCZZ	BB		C	Fusing harness (100V series except for Taiwan)[AR-405]
	DHAi-3075FCZZ	AP		C	Fusing harness (200V series)[AR-405]
	DHAi-3073FCZZ	BA		C	Fusing harness (for Taiwan)[AR-405]
	DHAi-3105FCZZ	BB	N	C	Fusing harness (100V series except for Taiwan)[AR-505]
	DHAi-3106FCZZ	BB	N	C	Fusing harness (200V series)[AR-505]
	DHAi-3104FCZZ	AY	N	C	Fusing harness (for Taiwan)[AR-505]
13	XRESP50-06000	AA		C	E type ring
14	NGERH0863FCZZ	AB		C	Pick up roller gear (18T)
15	LPiN-0026MCZZ	AA		C	Spring pin (φ2-10)
16	NBRGM0096FCZ1	AB		C	Bearing
17	LFRM-0952FCZZ	AV		C	Fusing frame upper [AR-505(Taiwan only),and other models]
	LFRM-0952FCZ1	AS	N	C	Fusing frame upper [AR-505(except Taiwan)]
18	LPiNS0096FCZZ	AB		C	Pin (φ3-12)
19	LDAiU0450FCZZ	AB		C	Ratchet block
20	JKNBP0121FCZZ	AE		C	Fusing knob
21	MSPRC1954FCZ1	AC		C	Ratchet spring
22	LX-BZ0711FCZZ	AA		C	Screw (3×8)
23	NSFTZ2461FCZZ	AM		C	Jam release shaft
24	LFiX-0441FCZZ	AB		C	Fusing shaft fixing plate F
25	LFiX-0442FCZZ	AB		C	Fusing shaft fixing plate R
26	MSPRC2629FCZZ	AC		C	Open and shut spring S
27	LPLTM5396FCZZ	AL		C	Upper pawl fixing plate
28	MSPRC2692FCZZ	AB		C	Upper pawl spring
29	PTME-0168FCZZ	AF		C	Upper separator pawl
30	PCÖVP1442FCZZ	AR		C	Upper pawl fixing plate cover [except AR-505]
	PGiDM1882FCZZ	AP	N	C	Upper pawl fixing plate cover [AR-505]
31	MLEVP0749FCZZ	AD		C	Open and shut lever [except AR-505]
	MLEVP0778FCZZ	AD	N	C	Open and shut lever [AR-505]
32	RLMPU0630FCZZ	AZ		B	Heater lamp(Sub) (120V/127V) (100V series except Taiwan)[except AR-405,505]
	RLMPU0618FCZZ	AZ		B	Heater lamp(Sub) (100V/110V) (for Taiwan)[except AR-405,505]
	RLMPU0634FCZZ	BA		B	Heater lamp(Sub) (200V series) [except AR-405,505]
	RLMPU0643FCZZ	AZ		B	Heater lamp(Sub) (100V series except for Taiwan)[AR-405]
	RLMPU0641FCZZ	AZ		B	Heater lamp(Sub) (for Taiwan)[AR-405]
	RLMPU0655FCZZ	AZ	N	B	Heater lamp(Sub) (100V series except for Taiwan)[AR-505]
	RLMPU0653FCZZ	AZ	N	B	Heater lamp(Sub) (for Taiwan)[AR-505]
	RLMPU0634FCZZ	BA		B	Heater lamp(Sub) (200V series)
33	RLMPU0617FCZZ	AZ		B	Heater lamp(Main) (100V/110V) (100V series except Taiwan)[except AR-405,505]
	RLMPU0624FCZZ	AZ		B	Heater lamp(Main) (120V/127V) (for Taiwan)[except AR-405,505]
	RLMPU0628FCZZ	BA		B	Heater lamp(Main) (200V series) [except AR-405,505]
	RLMPU0642FCZZ	AZ		B	Heater lamp(Main) (100V series except Taiwan)[AR-405]
	RLMPU0640FCZZ	AZ		B	Heater lamp(Main) (for Taiwan)[AR-405]
	RLMPU0654FCZZ	AZ	N	B	Heater lamp(Main) (100V series except Taiwan)[AR-505]
	RLMPU0652FCZZ	AZ	N	B	Heater lamp(Main) (for Taiwan)[AR-505]
	RLMPU0628FCZZ	BA		B	Heater lamp(Main) (200V series)[AR-405,505]
34	LSTPF0307FCZZ	AB		C	Roller stopper F
35	LBSHZ0330FCZZ	AP		C	Heat-resistant bush S
36	NBRGY0599FCZZ	AU		C	Fusing bearing
37	NRÖLT1228FCZZ	BF		C	Upper heat roller [except AR-505,AR-405:100V series]
	NRÖLT1277FCZZ	BE		C	Upper heat roller (200V series)[AR-405]
	NRÖLT1283FCZZ	BG	N	C	Upper heat roller [AR-505]
38	NGERH1214FCZZ	AP		C	Fusing gear (48T)
39	LSTPF0172FCZZ	AA		C	Roller stopper
40	LBNDJ0043FCZ1	AA		C	Snap band
41	PGiDM1839FCZZ	AQ		C	Fusing front upper paper guide
42	LX-BZ0342FCZZ	AB		C	Screw (M3)
43	XBPSD30P08KS0	AA		C	Screw (3×8KS)
44	PHÖG-7004SCZZ	AD		C	Bushing
45	LHLDW1334FCZZ	AA		C	Wire holder (Except 100V/110V)
46	PTME-0278FCZZ	AM	N	C	Fusing upper separate pawl [AR-505]
47	LPLTM5694FCZZ	AD	N	C	Top CL fixing plate (200V series)[AR-505]
	LPLTM5699FCZZ	AF	N	C	Top CL fixing plate (120V/127V)[AR-505]
48	NRÖLN0874FCZZ	AK		C	Fusing top roller [AR-505]
49	MSPRT2815FCZZ	AD	N	C	CL roller SP [AR-505]



## 16 Fusing unit 1

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
50	NBRGC0249FCZZ	AC		C	Top CL roller bearing [AR-505]
901	(Unit)				
	DUNTW6931FC11	CC		E	Fusing unit (120V/127V) (100V series)[AR-280,285,335]
	DUNTW6931FC12	CC		E	Fusing unit (200V series)[AR-280,285,335]
	DUNTW6931FCZZ	CC		E	Fusing unit (100V/110V) (Taiwan)[AR-280,285,335]
	DUNTW6931FC14	CB		E	Fusing unit (120V/127V)[AR-250,281,286,336]
	DUNTW6931FC15	CC		E	Fusing unit (200V series)[AR-250,281,286,336]
	DUNTW6931FC13	CB		E	Fusing unit (110V) (Taiwan)[AR-250,281,286,336]
	DUNTW6931FC21	CB		E	Fusing unit (120V/127V)[AR-405]
	DUNTW6931FC22	CC		E	Fusing unit (200V series)[AR-405]
	DUNTW6931FC20	CB		E	Fusing unit (100V/110V) (Taiwan)[AR-405]
	DUNTW6931FC31	CD	N	E	Fusing unit (120V/127V)[AR-505]
	DUNTW6931FC32	CD	N	E	Fusing unit (200V series)[AR-505]
	DUNTW6931FC30	CC	N	E	Fusing unit (100V/110V) (Taiwan)[AR-505]

## 16 Fusing unit 1



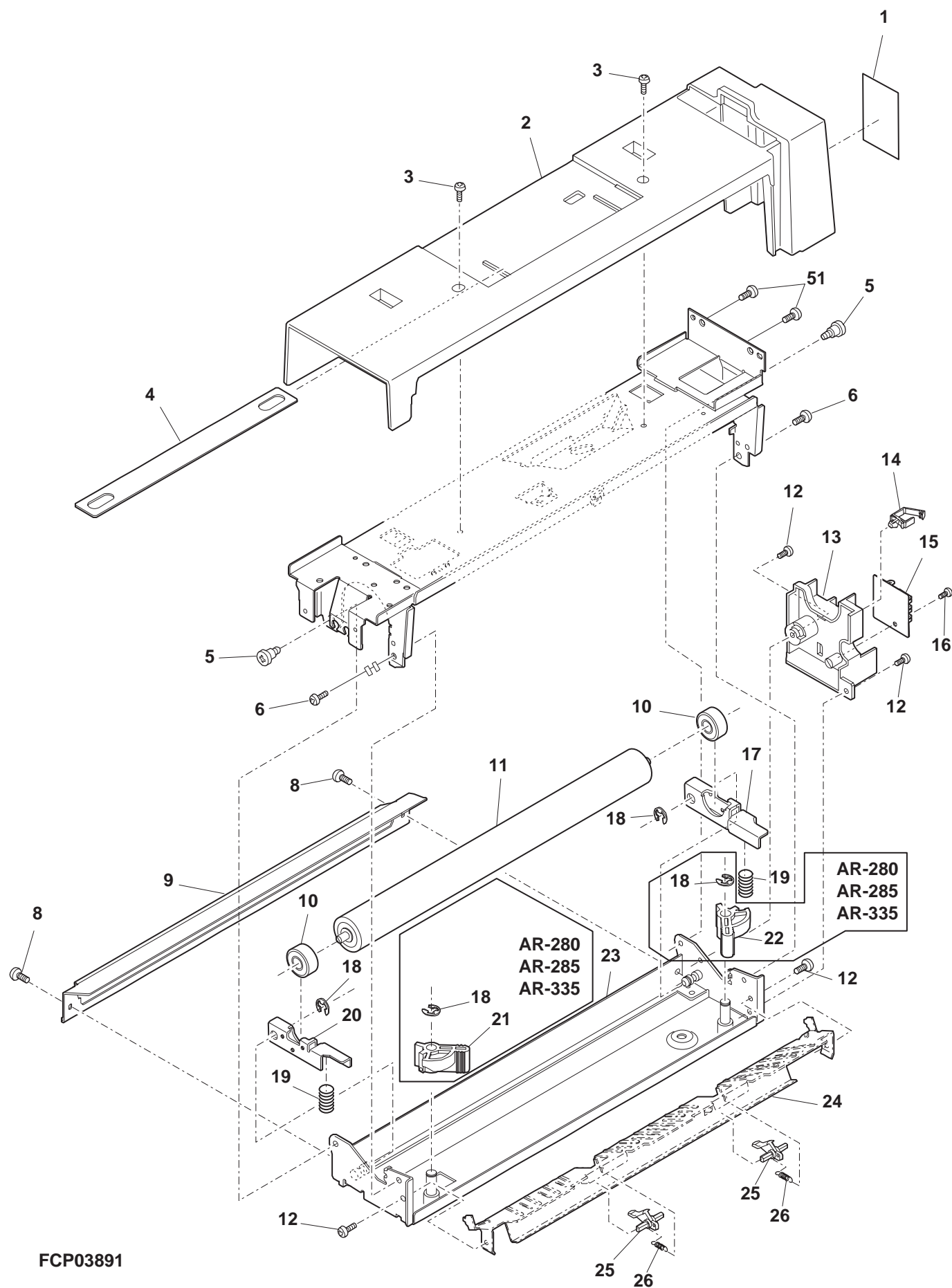
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## 17 Fusing unit 2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	TCAUH1035FCZZ	AC		C	HT caution label
2	PCOVP1441FCZZ	AZ		C	Fusing cover
3	LX-BZ0873FCZZ	AC		C	Screw (4×6)
4	JHNDP0110FCZZ	AE		C	Fusing handle
5	LX-BZ0270FCZZ	AC		C	Screw
6	XBBSD40P06000	AA		C	Screw (4×6)
8	XBPSD30P06KS0	AA		C	Screw (3×6KS)
9	PGIDH1784FCZZ	AK		C	Fusing front paper guide
10	NBRGY0513FCZZ	AK		B	Pressure roller bearing
11	NRÖLi1206FCZZ	BG		C	Lower heat roller(maintenance kit) [except AR-505]
	NRÖLi1286FCZZ	BL	N	C	Lower heat roller(maintenance kit) [AR-505]
12	XBPSD30P08KS0	AA		C	Screw (3×8KS)
13	LHLDZ1386FCZZ	AK		C	Interface PWB holder
14	LHLDW7076SCZZ	AB		C	Cable holder (LWS-1S) [except AR-505]
	LHLDW1057FCZZ	AB		C	Cable holder (LWS-3S) [AR-505]
15	CPWBF1299FC51	AL		E	Fusing interface PWB
16	XEBSD30P10000	AA		C	Screw (3×10)
17	MLEVF0741FCZZ	AG		C	Pressure lever F
18	XRESP50-06000	AA		C	E type ring
19	MSPRC2631FCZZ	AC		C	Fusing pressure spring (100V series)[AR-405]
	MSPRC2801FCZZ	AD		C	Fusing pressure spring (200V series)[AR-405]
	MSPRC2806FCZZ	AD	N	C	Fusing pressure spring (100V series)[AR-505]
	MSPRC2810FCZZ	AD	N	C	Fusing pressure spring (200V series)[AR-505]
20	MLEVF0742FCZZ	AG		C	Pressure lever R
21	MLEVP0751FCZ1	AE		C	Pressure adjusting lever R [AR-280,285,335]
22	MLEVP0750FCZ1	AE		C	Pressure adjusting lever F [AR-280,285,335]
23	CFRM-0953FC01	AU		C	Fusing lower frame [AR-280,285,335]
	CFRM-0953FC02	AS		C	Fusing lower frame [except AR-280,285,335]
24	LPLTM5397FCZZ	AM		C	Lower pawl fixing plate [except AR-505]
	PGIDH1881FCZZ	AN	N	C	Lower pawl fixing plate [AR-505]
25	P TME-0174FCZ1	AG		C	Lower separator pawl
26	MSPRC2630FCZZ	AB		C	Lower pawl spring
51	XHBSE40P08000	AA		C	Screw (4×8)
	(Unit)				
901	DUNTW6931FC11	CC		E	Fusing unit (120V/127V)[AR-280,285,335]
	DUNTW6931FCZZ	CC		E	Fusing unit (100V/110V)[AR-280,285,335]
	DUNTW6931FC12	CC		E	Fusing unit (200V series)[AR-280,285,335]
	DUNTW6931FC14	CB		E	Fusing unit (120V/127V)
	DUNTW6931FC13	CB		E	Fusing unit (110V)
	DUNTW6931FC15	CC		E	Fusing unit (200V series)[AR-250,281,286,336]
	DUNTW6931FC21	CB		E	Fusing unit (120V/127V) (100V series except Taiwan)[AR-405]
	DUNTW6931FC20	CB		E	Fusing unit (100V/110V) (Taiwan)[AR-405]
	DUNTW6931FC22	CC		E	Fusing unit (200V series)[AR-405]
	DUNTW6931FC31	CD	N	E	Fusing unit (100V/110V) (100V series except Taiwan)[AR-505]
	DUNTW6931FC30	CC	N	E	Fusing unit (100V/110V) (Taiwan)[AR-505]
	DUNTW6931FC32	CD	N	E	Fusing unit (200V series)[AR-505]

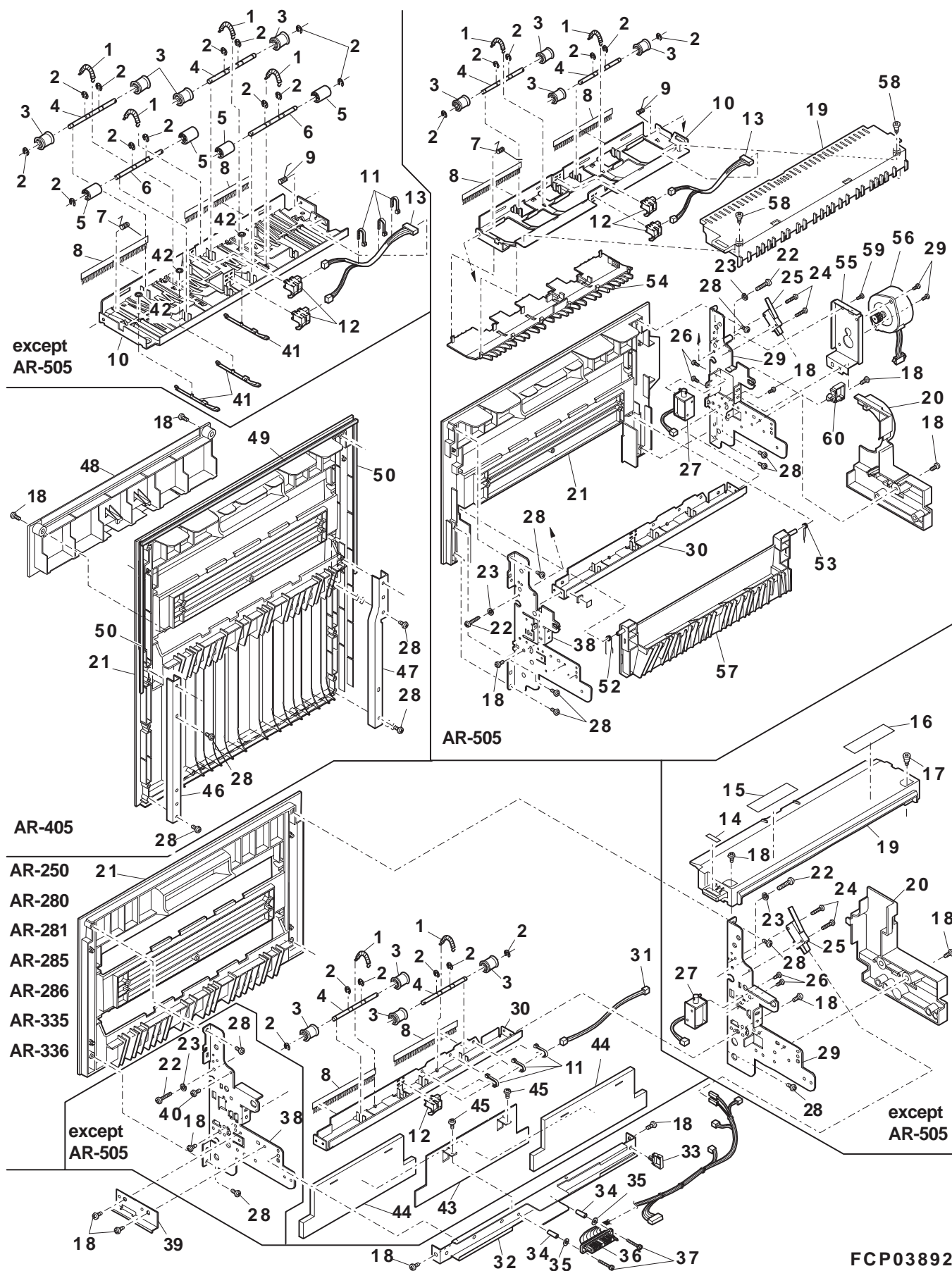
# 17 Fusing unit 2



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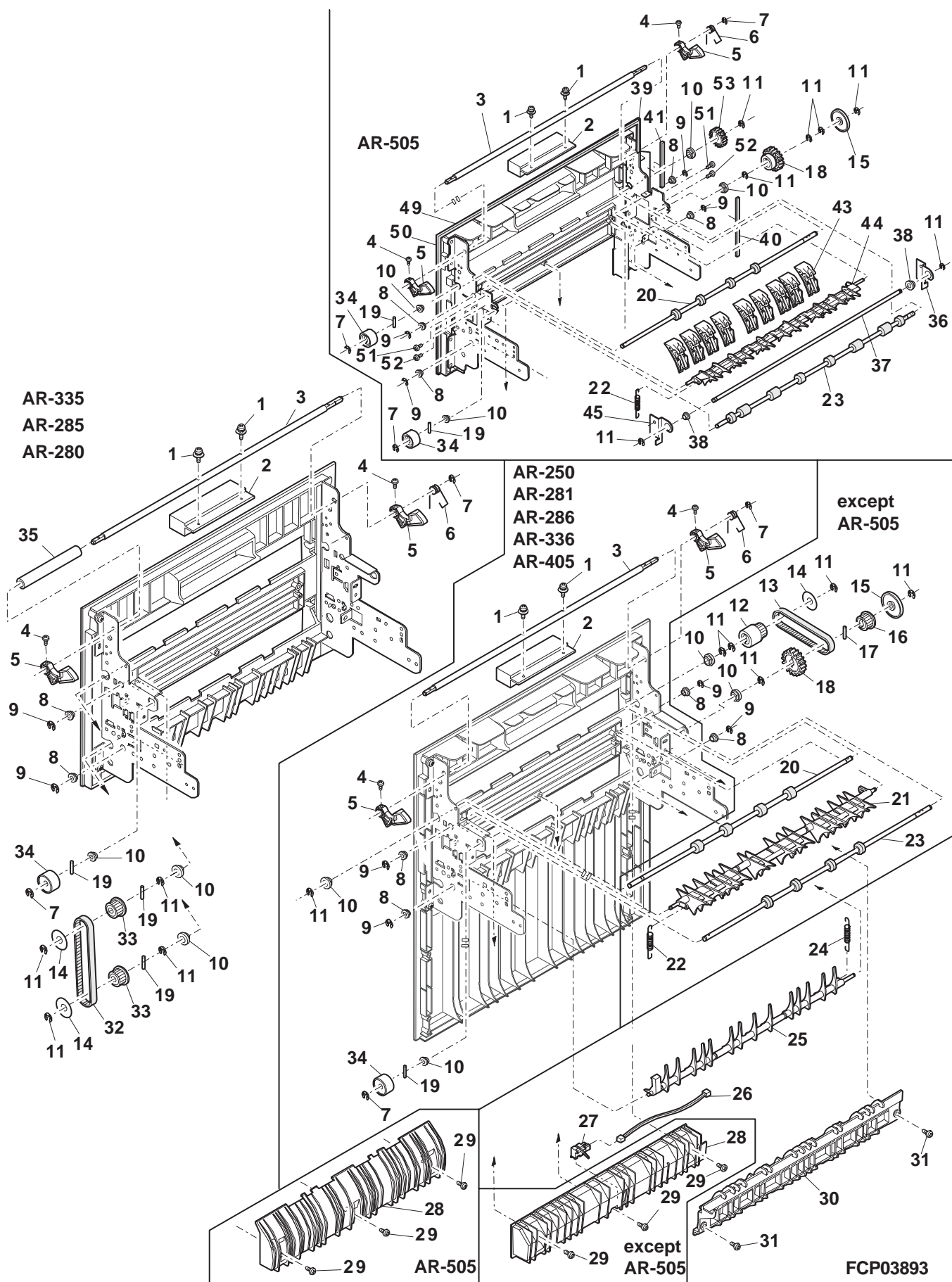
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18 Delivery turnover unit 1(AR-405,505 1bin, others 2bin)



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19 Delivery turnover unit 2(AR-405,505 1bin, others 2bin)

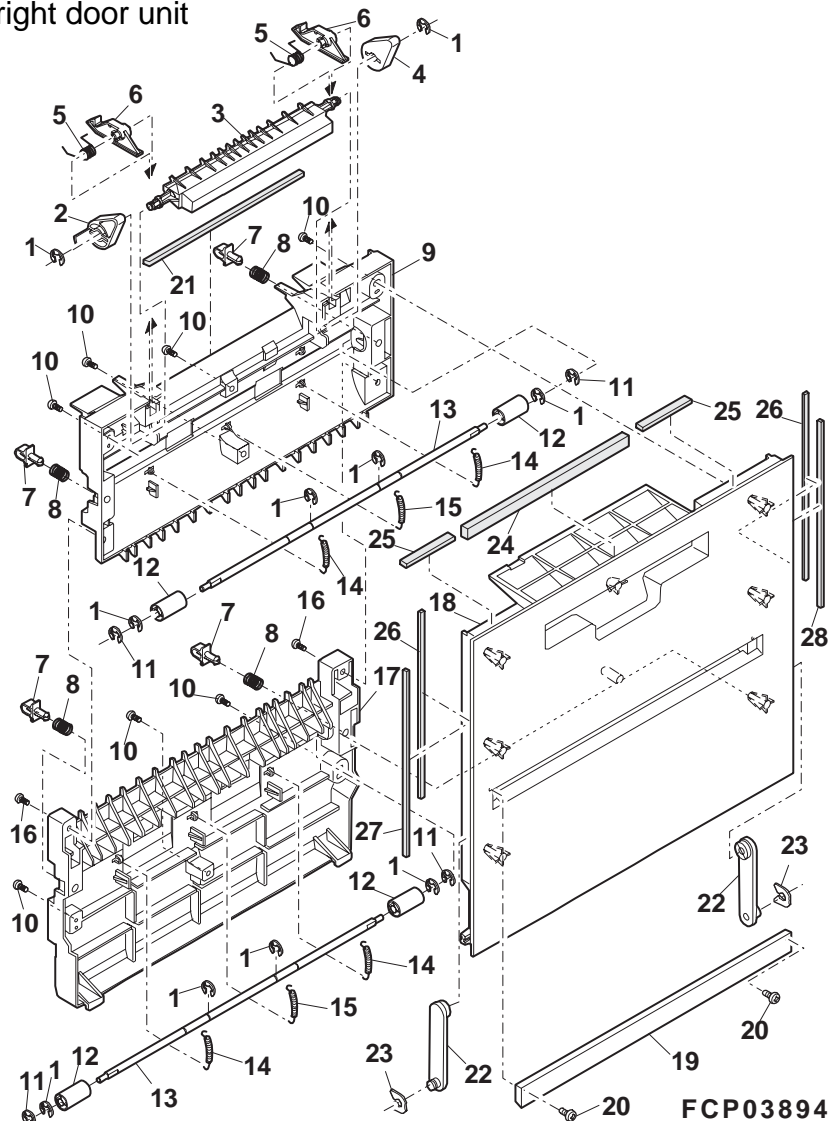




## 20 Vertical transport right door unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XRESP50-06000	AA		C	E type ring
2	MARMP0241FCZZ	AC		C	Lever arm F
3	MLEVP0752FCZZ	AH		C	Right door lock lever
4	MARMP0242FCZZ	AC		C	Lever arm R
5	MSPRC2635FCZZ	AB		C	Lock spring
6	MARMP0251FCZZ	AD		C	Lock lever arm
7	NBRGP0588FCZZ	AC		C	Collar shaft bearing
8	MSPRC2634FCZZ	AB		C	Transport collar pressure spring
9	PGIDM1804FCZZ	AQ		C	Right door paper guide upper
10	XEBSD40P10000	AA		C	Screw (4×10)
11	XRESP40-06000	AA		C	E type ring
12	NRÖLP0896FCZZ	AC		C	Transport roller
13	NSFTZ2464FCZZ	AN		C	Transport collar shaft
14	MSPRC2687FCZZ	AB		C	Transport collar pressure spring
15	MSPRC2637FCZZ	AC		C	Transport collar pressure spring 2
16	XEBSD40P12000	AA		C	Screw (4×12)
17	PGIDM1805FCZZ	AR		C	Right door paper guide lower
18	GDÖR-0024FCZZ	AY		D	Right door
19	PCÖVP1469FCZZ	AF		C	LCC cover
20	XEPSE40P10000	AA		C	Screw (4×10)
21	PCUSG0359FCZZ	AC		C	Right door paper guide upper cushion
22	LSTPP0275FCZZ	AE		C	Stopper
23	PRNGP0077FCZZ	AA		C	Ring(E7)
24	PMLT-1167FCZZ	AF		C	Right door cushion A
25	PMLT-1168FCZZ	AB		C	Right door cushion B
26	PMLT-1169FCZZ	AC		C	Right door cushion C
27	PMLT-1191FCZZ	AC		C	Right door cushion F
28	PMLT-1192FCZZ	AC		C	Right door cushion R
					(AB series)
					(AB series)

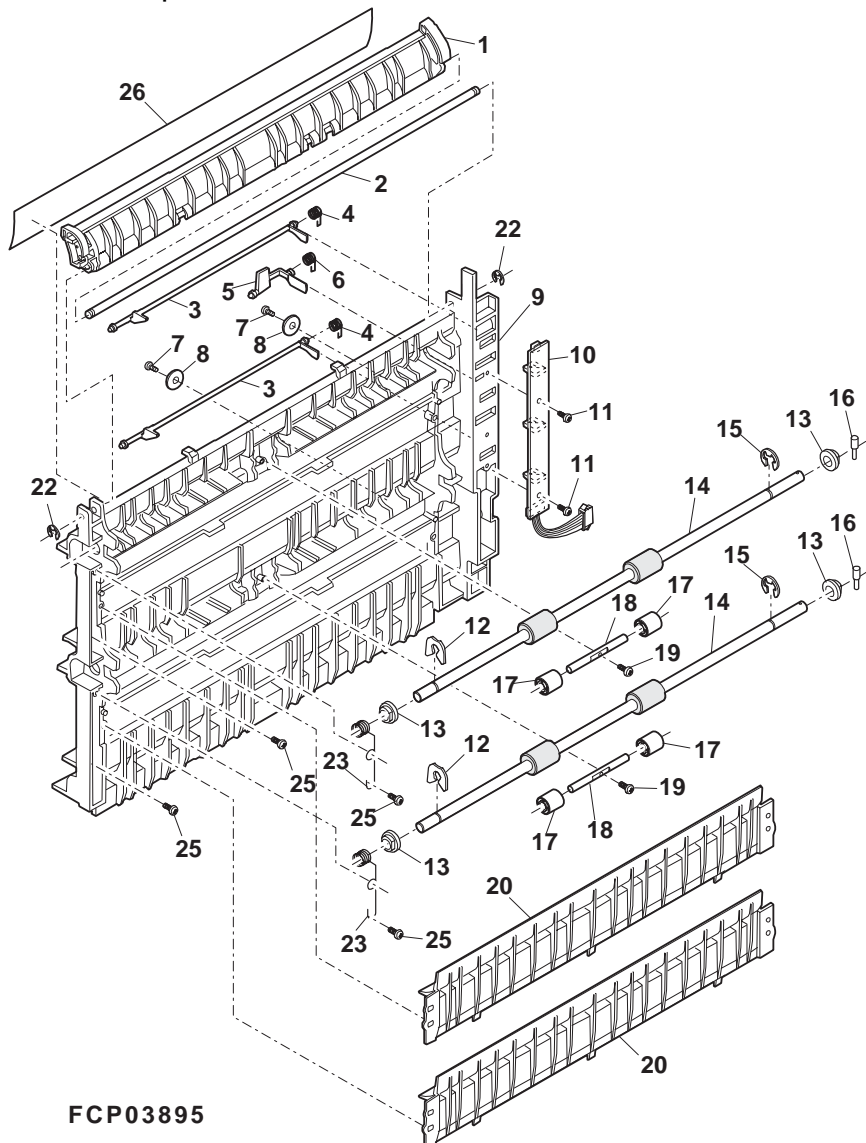
## 20 Vertical transport right door unit



## 21 Vertical transport unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	PG i DM1803FCZZ	AK		C	U-turn paper guide
2	NSFTZ2462FCZZ	AG		C	PG rotation shaft
3	MLEVP0758FCZZ	AE		C	Vertical transport actuator
4	MSPRC2633FCZZ	AB		C	Actuator return spring
5	MLEVP0759FCZZ	AD		C	Door detect actuator
6	MSPRC2636FCZZ	AB		C	Door detect actuator spring
7	XEBSD30P06000	AA		C	Screw (3×6)
8	LX-WZ2028SCZZ	AA		C	Washer (φ12)
9	LSTYP0229FCZ1	AX		C	Transport stay right
10	CPWBF1256FC31	AT		E	PFD PWB
11	XEBSD30P10000	AA		C	Screw (3×10)
12	PRNGP0077FCZZ	AA		C	Ring(E7)
13	NBRGP0626FCZZ	AC		C	Bearing (M8)
14	NRÖLR1215FCZZ	AS		C	Vertical transport roller
15	XRESP70-08000	AA		C	E type ring
16	LX-BZ0670FCZZ	AC		C	Screw (3×8)
17	PCLR-0442FCZZ	AD		C	Sub collar
18	NSFTZ2463FCZ1	AG		C	Sub shaft
19	XEBSD30P12000	AA		C	Screw (3×12)
20	PG i DM1802FCZZ	AK		C	PF paper guide
22	XRESP30-05000	AA		C	E type ring
23	MSPRC2710FCZZ	AD		C	Transport roller earth spring
25	XHBSE40P08000	AA		C	Screw (4×8)
26	PSHEP4626FCZZ	AE		C	Pressure PG sheet

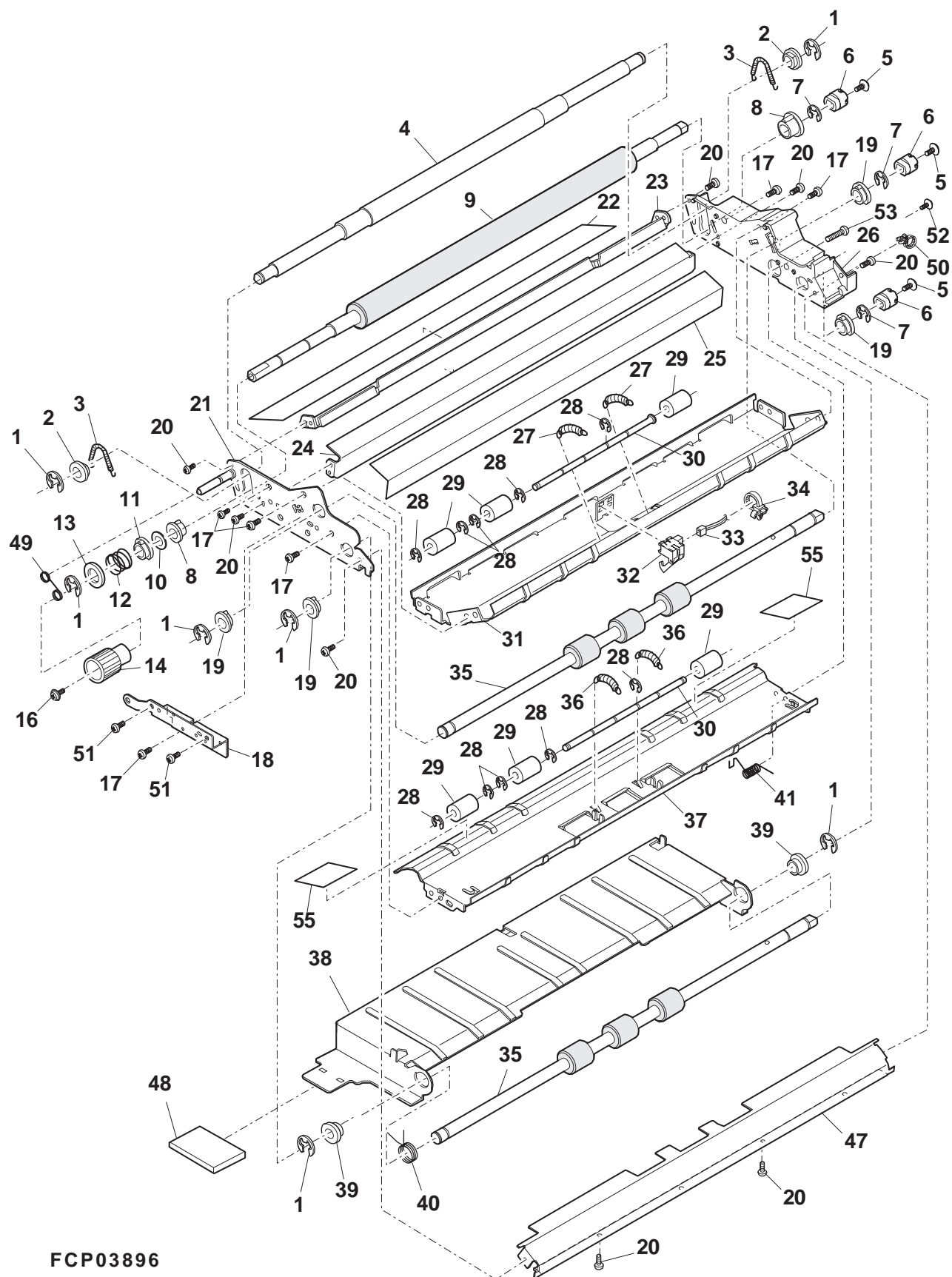
## 21 Vertical transport unit





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# 22 PS transport unit



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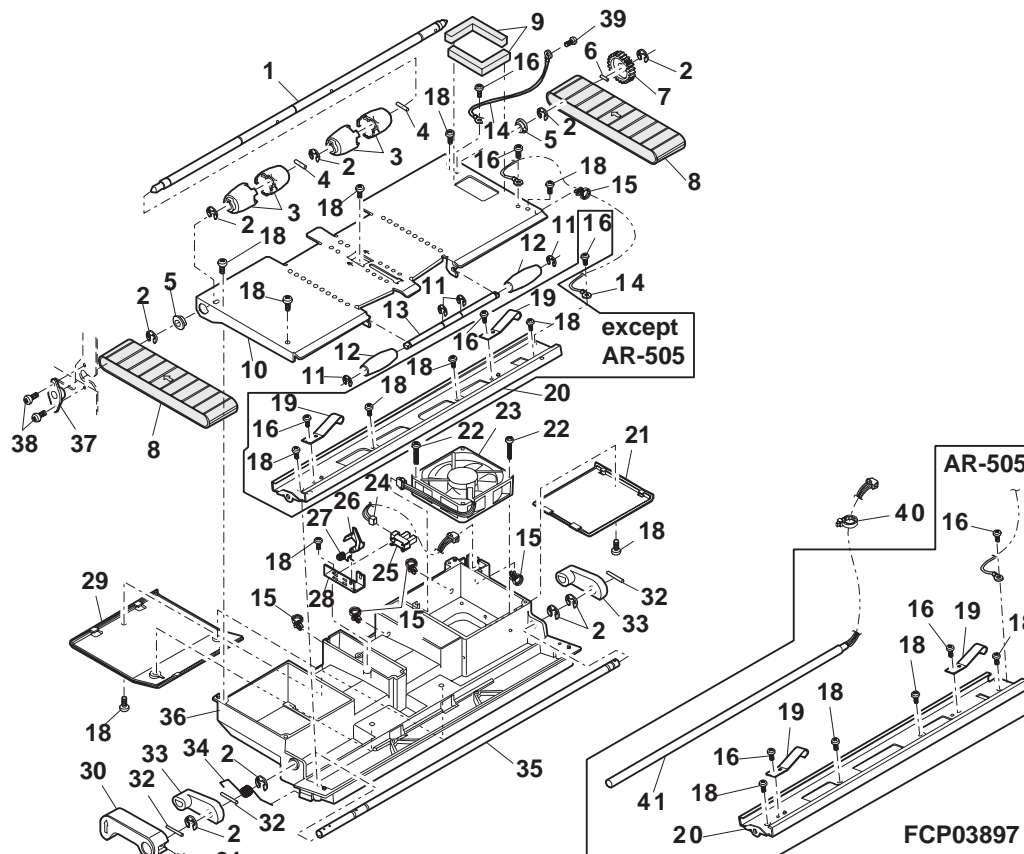
## 23 Suction unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	NSFTZ2458FCZZ	AM		C	Suction drive shaft
2	XRESP70-08000	AA		C	E type ring
3	NRÖLP1010FCZZ	AC		C	Suction drive roller
4	LPINS0075FCZZ	AB		C	Pin (φ3-10)
5	NBRGC0133FCZ1	AC		C	PF bearing (M8)
6	LPINS0096FCZZ	AB		C	Pin (φ3-12)
7	NGERH1256FCZZ	AE		C	Suction gear (26T)
8	NBLTH0312FCZZ	AK		B	Suction belt
9	PSEL-0753FCZZ	AC		C	Suction seal
10	PGIDH1783FCZZ	AM		C	Suction paper guide
11	XRESP50-06000	AA		C	E type ring
12	NRÖLP0833FCZ1	AC		C	Belt roller
13	NSFTZ2459FCZZ	AH		C	Suction shaft
14	DHAi-2897FCZZ	AD		C	TC earth harness
15	LBNDJ0043FCZ1	AA		C	Snap band
16	XHBSD40P08000	AA		C	Screw (4×8)
18	XEBSD40P12000	AA		C	Screw (4×12)
19	MSPRP2609FCZZ	AE		C	TC pressure spring
20	LRLM0148FCZZ	AM		C	TC guide rail
	LRLM0148FCZ1	AL	N	C	TC guide rail
21	PCÖVP1439FCZZ	AF		C	Suction cover A
22	XEPSD40P35000	AA		C	Screw (4×35)
23	NFANP0049FCZZ	AZ		B	Suction fan motor
24	DHAi-2836FCZZ	AP		C	Suction harness
25	VHPGP1A71A1-1	AG		B	Photo sensor (GP1A71A1)
26	MLEVP0748FCZZ	AF		C	Suction lever ACC
27	MSPRC2628FCZZ	AB		C	Suction ACC spring
28	LPLTM5395FCZZ	AE		C	Suction ACC fixing plate
29	PCÖVP1440FCZZ	AL		C	Suction cover B
30	MLEVP0747FCZZ	AG		C	Suction lift lever
31	XBPSD40P12KS0	AA		C	Screw (4X12KS)
32	LPINS0292FCZZ	AB		C	Pin (φ3-20)
33	LANGT1395FCZZ	AE		C	Suction lift angle
34	MSPRC2627FCZZ	AC		C	Suction lift spring
35	NSFTZ2460FCZZ	AP		C	Suction lift shaft
36	LFRM-0951FCZ1	AT		C	Suction frame
37	NBRGP0616FCZZ	AG		C	Bearing
38	LX-BZ3008SC0S	AA		C	Screw (3×8)
39	XHBSE40P08000	AA		C	Screw (4×8)
40	LBNDJ0013FCZ1	AA		C	Wire band
41	VHPSLA10310-1	AZ	N	C	LED lamp (SLA10310-1)

[except AR-505]

[AR-505]

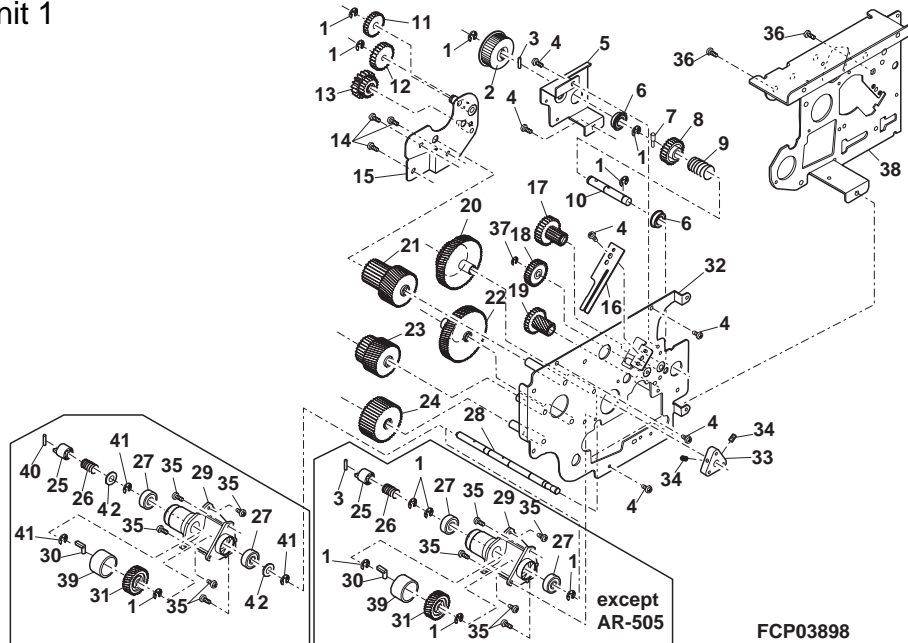
## 23 Suction unit



# 24 Main drive unit 1

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XRESP70-08000	AA		C	E type ring
2	NPLYZ0278FCZ1	AD		C	Paper feeding drive gear (38T) [except AR-405]
	NPLYZ0360FCZ2	AE		C	Paper feeding drive gear (19T) [AR-405]
3	LPINS0096FCZ2	AB		C	Pin (φ3-12)
4	XHBSE40P08000	AA		C	Screw (4×8)
5	LFRM-0942FCZ2	AF		C	Waste toner drive frame
6	NBRGY0466FCZ2	AK		B	Ball bearing (M8-M16)
7	LX-BZ0670FCZ2	AC		C	Screw (3×8)
8	NGERH1238FCZ2	AD		C	Waste toner gear (24T)
9	MSPRC2615FCZ2	AC		C	Waste toner spring
10	NSFTZ2447FCZ1	AL		C	Waste toner drive shaft
11	NGERH1062FCZ2	AE		C	DV idle gear (25T)
12	NGERH0349FCZ2	AC		C	Gear (28T)
13	NGERH1237FCZ2	AD		C	DV drive gear (21T)
14	LX-BZ0465FCZ2	AA		C	Screw (4×6)
15	CFRM-0941FC02	AM		C	Main drive frame C
16	MSPRP2608FCZ2	AD		C	Drum earth plate
17	NGERH1279FCZ2	AE		C	Waste toner gear (28T)
18	NGERH0742FCZ2	AB		C	Gear (36T)
19	NGERH1345FCZ2	AE		C	Waste toner gear (26T)
20	NGERH1232FCZ2	AQ		C	DR drive gear (66/33T)
21	NGERH1236FCZ2	AF		C	DV drive gear (50T)
22	NGERH1231FCZ2	AQ		C	DRPS gear (78T)
23	NGERH1234FCZ2	AF		C	Transport gear (48/28T)
24	NGERH1235FCZ2	AF		C	Transport gear (42T)
25	NCPL-0040FCZ2	AL		C	DR cupring N [except AR-505]
	NCPL-0044FCZ2	BC	N	C	DR flange cupring [AR-505]
26	MSPRC2614FCZ2	AC		C	DR cupring spring [except AR-505]
	MSPRC2813FCZ2	AD	N	C	DR cupring spring [AR-505]
27	NBRGY0093FCZ2	AK		B	Roller bearing [except AR-505]
	NBRGC0634FCZ2	AM	N	B	Roller bearing [AR-505]
28	NSFTZ2445FCZ1	AL		C	DR drive shaft [except AR-505]
	NSFTZ2564FCZ2	AP	N	C	DR drive shaft [AR-505]
29	LPFTF0096FCZ2	AP		C	DR unit control flange
30	LPINS0255FCZ2	AE		C	L type pin
31	NGERH1233FCZ2	AP		C	DR drive gear (30T) [except AR-505]
	NGERH1351FCZ2	AP	N	C	DR drive gear (30T) [AR-505]
32	CFRM-0940FC01	AZ		C	Main drive frame R
33	MJNTM0020FCZ2	AM		C	Flay wheel joint plate
34	LX-BZ0576FCZ2	AC		C	Screw (4×6)
35	XHBSD30P08000	AA		C	Screw (3×8)
36	XBPSD40P08KS0	AA		C	Screw (4×8KS)
37	XRESP40-06000	AA		C	E type ring
38	CFRM-0939FC01	AR		C	Main drive frame F
39	PCLR-0452FCZ2	AE		C	30T gear collar [except AR-505]
	PCLR-0459FCZ2	AF	N	C	30T gear collar [AR-505]
40	LPINS0157FCZ2	AB		C	Pin (φ314) [AR-505]
41	XRESP90-08000	AA		C	E type ring [AR-505]
42	LX-WZ0089FCZ2	AB		C	Washer [AR-505]
	(Unit)				
901	CFRM-0939FC53	BT		E	Main drive unit (Include Block 26) [except AR-405,505]
	CFRM-0939FC54	BT		E	Main drive unit (Include Block 26) [AR-405]
	CFRM-0939FC55	BU	N	E	Main drive unit (Include Block 26) [AR-505]

# 24 Main drive unit 1



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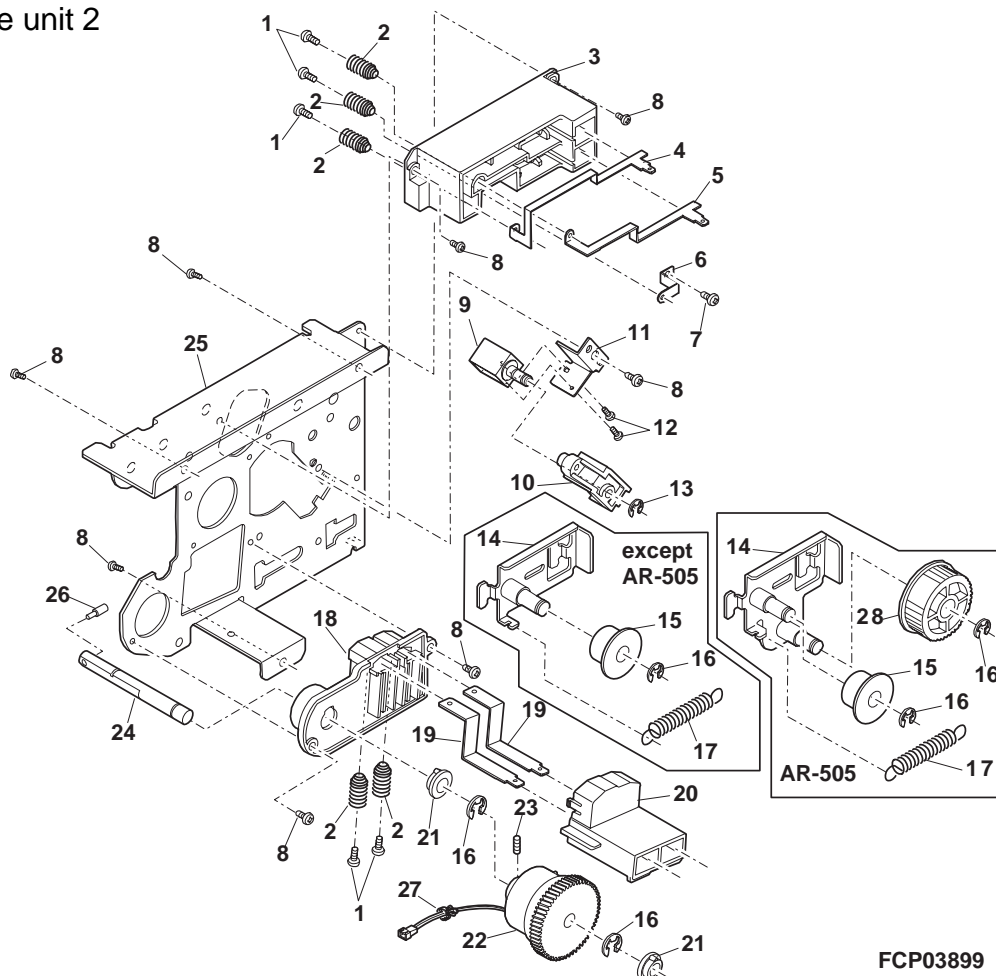
## 25 Main drive unit 2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XBPSD30P06000	AA		C	Screw (3×6)
2	MSPRP1293FCZZ	AB		C	Electrode spring
3	LHLDZ1365FCZZ	AL		C	High voltage holder MC
4	LPLTM5385FCZZ	AK		C	High voltage terminal plate GB
5	LPLTM5384FCZZ	AH		C	High voltage terminal plate MC
6	LPLTM5387FCZZ	AE		C	High voltage terminal plate GND
7	XHBSD30P06000	AA		C	Screw (3×6)
8	XHBSE40P08000	AA		C	Screw (4×8)
9	RPLU-0326FCZ1	AN		B	Separator pawl solenoid
10	MLEVP0743FCZZ	AE		C	Separator solenoid lever
11	LPLTM5386FCZZ	AE		C	Separator solenoid fixing plate
12	XBPSD20P03000	AA		C	Screw (2×3)
13	XRESP40-06000	AA		C	E type ring
14	CPLTM5383FC01	AH		C	Drive tension plate
	CPLTM5668FC01	AK	N	C	Drive tension plate
15	NPLYZ0259FCZZ	AC		C	Tension pulley 19
16	XRESP70-08000	AA		C	E type ring
17	MSPRC2613FCZZ	AD		C	Drive tension spring
18	LHLDZ1366FCZZ	AL		C	High voltage holder TC
19	QTANZ0206FCZZ	AF		C	TC high voltage holder terminal
20	PCÖVP1432FCZZ	AH		C	Holder terminal cover
21	NBRGC0133FCZZ	AC		C	PF bearing (M8)
22	PCLC-0286FCZZ	AY		B	PS clutch
23	LX-BZ0576FCZZ	AC		C	Screw (4×6)
24	NSFTZ2446FCZZ	AL		C	PS drive shaft
25	CFRM-0939FC01	AR		C	Main drive frame F
26	LX-BZ0670FCZZ	AC		C	Screw (3×8)
27	LBJNDJ0043FCZ1	AA		C	Snap band
28	NPLYZ0266FCZZ	AC		C	Pulley
	(Unit)				
901	CFRM-0939FC53	BT		E	Main drive unit
	CFRM-0939FC54	BT		E	Main drive unit (Include Block 25)
	CFRM-0939FC55	BU	N	E	Main drive unit (Include Block 25)

[except AR-505]

[AR-505]

## 25 Main drive unit 2

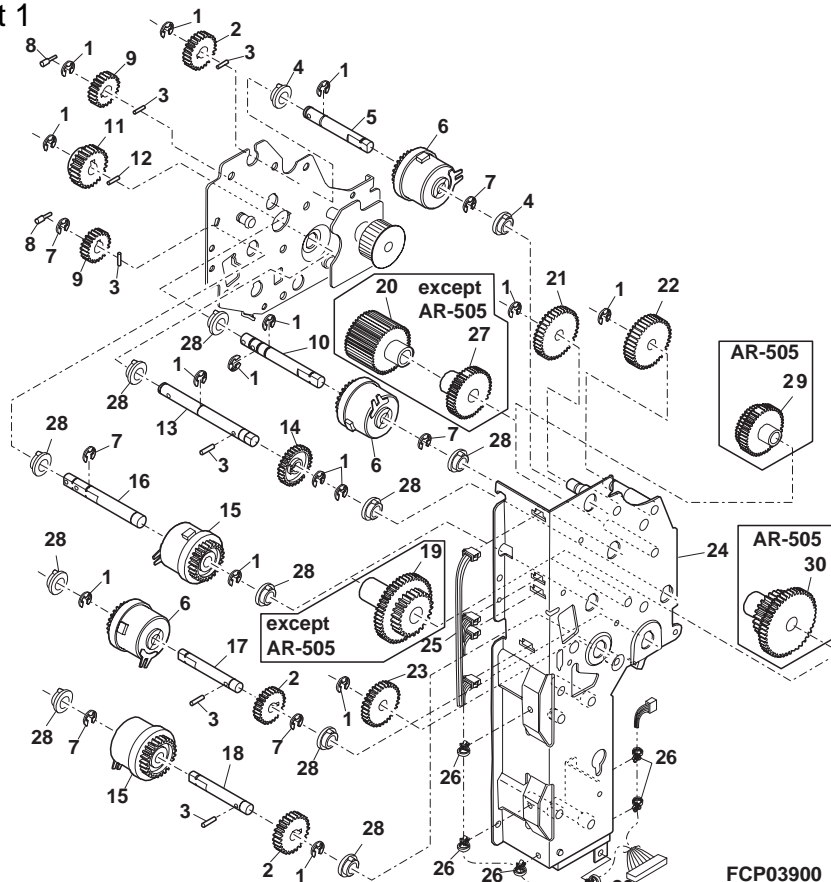


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## 26 Paper feeding drive unit 1

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XRESP70-08000	AA		C	E type ring
2	NGERH0111FCZZ	AD		C	Gear (24T)
3	LPINS0155FCZZ	AA		C	Pin (φ3-10)
4	NBRGC2019SCZZ	AC		C	Bearing (M8)
5	NSFTZ2449FCZZ	AH		C	MF drive shift
6	PCLC-0287FCZZ	AV		B	Transport clutch (5KL)
7	XRESP50-06000	AA		C	E type ring
8	LX-BZ0670FCZZ	AC		C	Screw (3×8)
9	NGERH0457FCZZ	AC		C	DV drive gear R (22T)
10	NSFTZ2450FCZZ	AK		C	MF rear drive shaft [except AR-505]
	NSFTZ2557FCZZ	AK	N	C	MF rear drive shaft [AR-505]
11	NGERH1248FCZZ	AF		C	ADU gear (25T)
12	LPINS0096FCZZ	AB		C	Pin (φ3-12)
13	NSFTZ2454FCZZ	AH		C	ADU HI shaft [except AR-505]
	NSFTZ2556FCZZ	AH	N	C	ADU HI shaft [except AR-505]
14	NGERH0349FCZZ	AC		C	Gear (28T)
15	PCLC-0288FCZZ	AV		B	Transport clutch (5KHI)
16	NSFTZ2451FCZZ	AK		C	PS front drive shaft [except AR-505]
	NSFTZ2558FCZZ	AK	N	C	PS front drive shaft [AR-505]
17	NSFTZ2457FCZZ	AH		C	Paper feeding LO shaft [except AR-505]
	NSFTZ2559FCZZ	AH	N	C	Paper feeding LO shaft [AR-505]
18	NSFTZ2455FCZZ	AH		C	Paper feeding HI shaft [except AR-505]
	NSFTZ2560FCZZ	AH	N	C	Paper feeding HI shaft [AR-505]
19	NGERH1243FCZZ	AF		C	Paper feeding drive gear (32T) [except AR-505]
	NGERH1337FCZZ	AF		C	Paper feeding drive gear (35T-48T) [AR-505]
20	NGERH1242FCZZ	AF		C	Paper feeding drive gear (35T) [except AR-405]
21	NGERH0070FCZZ	AD		C	DV gear (36T)
22	NGERH1241FCZZ	AE		C	Gear (36T)
23	NGERH0071FCZZ	AD		C	DV gear R (31T)
24	CFRM-0946FC02	BA		C	Paper feeding drive frame R [except AR-505]
	CFRM-0946FC03	BA	N	C	Paper feeding drive frame R [AR-505]
25	DHAI-2829FCZZ	AW		C	Paper feeding drive harness
26	LBDJ0043FCZ1	AA		C	Snap band
27	NGERH1336FCZZ	AE		C	Paper feeding drive gear (40T) [except AR-505]
28	NBRGC2019SCZZ	AC		C	Bearing (M8) [AR-405]
	NBGY0466FCZZ	AK		C	Bearing [AR-505]
29	NGERH1242FCZZ	AF		C	Delivery drive gear (35T) [AR-505]
30	NGERH1335FCZZ	AE		C	Paper feeding drive gear (35T) [AR-505]
(Unit)					
901	CFRM-0945FC31	BV		E	Paper feeding drive unit (include Block 28) [except AR-405,505]
	CFRM-0945FC33	BU		E	Paper feeding drive unit (include Block 28) [AR-405]
	CFRM-0945FC34	BW	N	E	Paper feeding drive unit (include Block 28) [AR-505]

## 26 Paper feeding drive unit 1

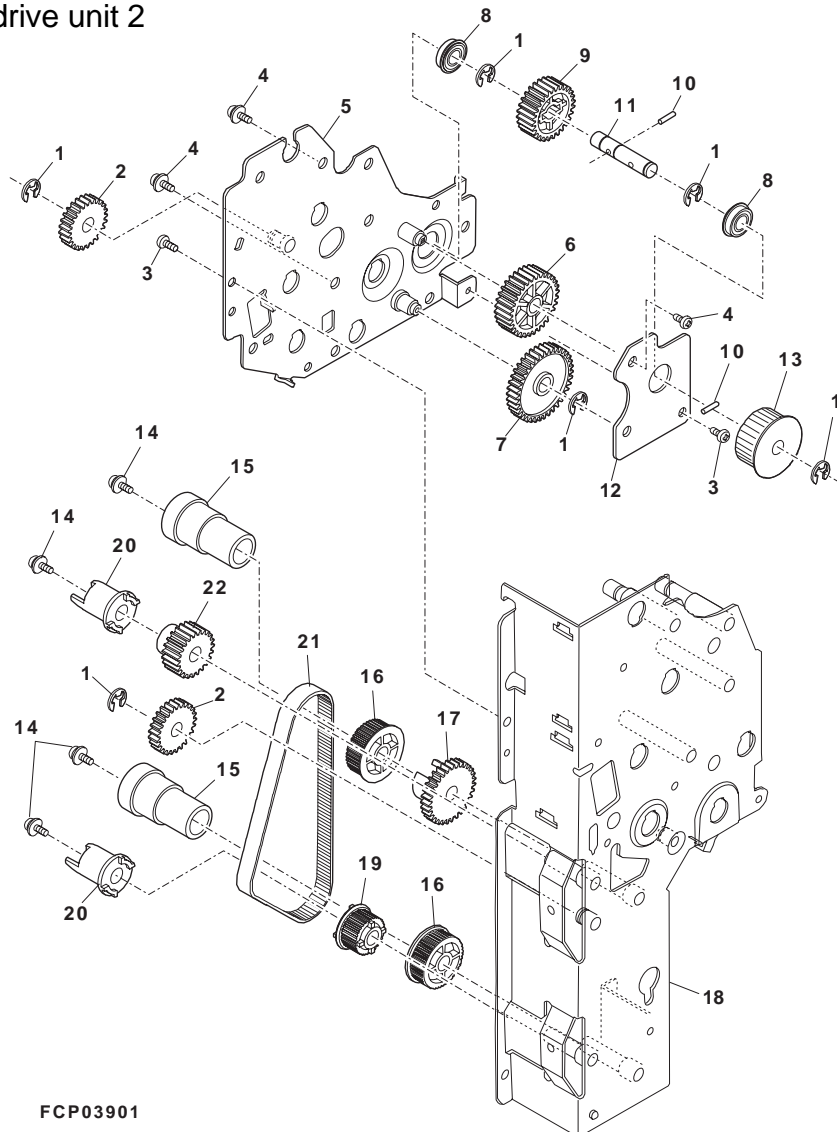




## 27 Paper feeding drive unit 2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XRESP70-08000	AA		C	E type ring
2	NGERH0140FCZZ	AC		C	Stirring gear U (25T)
3	XHBSD40P08000	AA		C	Screw (4×8)
4	XBPSD40P08KS0	AA		C	Screw (4×8KS)
5	CFRM-0945FC02	AU		C	Paper feeding drive frame F
6	NGERH1244FCZZ	AE		C	Transport idle gear (32T)
7	NGERH0483FCZZ	AB		C	Gear (38T)
8	NBRGY0466FCZZ	AK		B	Ball bearing (M8-M16)
9	NGERH1245FCZZ	AF		C	Transport drive gear (28T)
10	LPINS0096FCZZ	AB		C	Pin (φ3-12)
11	NSFTZ2456FCZZ	AK		C	Drive separator shaft
12	LFRM-0947FCZZ	AE		C	Paper feeding transport drive frame
13	NPLYZ0285FCZ1	AE		C	Transport drive pulley (32T)
14	LX-BZ0829FCZZ	AB		C	Screw (Left type)
15	NCPL-0031FCZ1	AD		C	PF cup ring
16	NPLYZ0336FCZZ	AE		C	PF pulley 44P
17	NGERH1246FCZZ	AE		C	PF drive gear (33T)
18	CFRM-0946FC02	BA		C	Paper feeding drive frame R
19	NPLYZ0337FCZZ	AE		C	Transport pulley 32P
20	NCPL-0032FCZZ	AD		C	Transport cup ring
21	NBLTH0294FCZZ	AH		B	Paper feeding drive belt
22	NGERH1247FCZZ	AE		C	Transport drive gear (24T)
(Unit)					
901	CFRM-0945FC31	BV		E	Paper feeding drive unit (include Block 27) [except AR-405,505]
	CFRM-0945FC33	BU		E	Paper feeding drive unit (include Block 27) [AR-405]
	CFRM-0945FC34	BW	N	E	Paper feeding drive unit (include Block 27) [AR-505]

## 27 Paper feeding drive unit 2

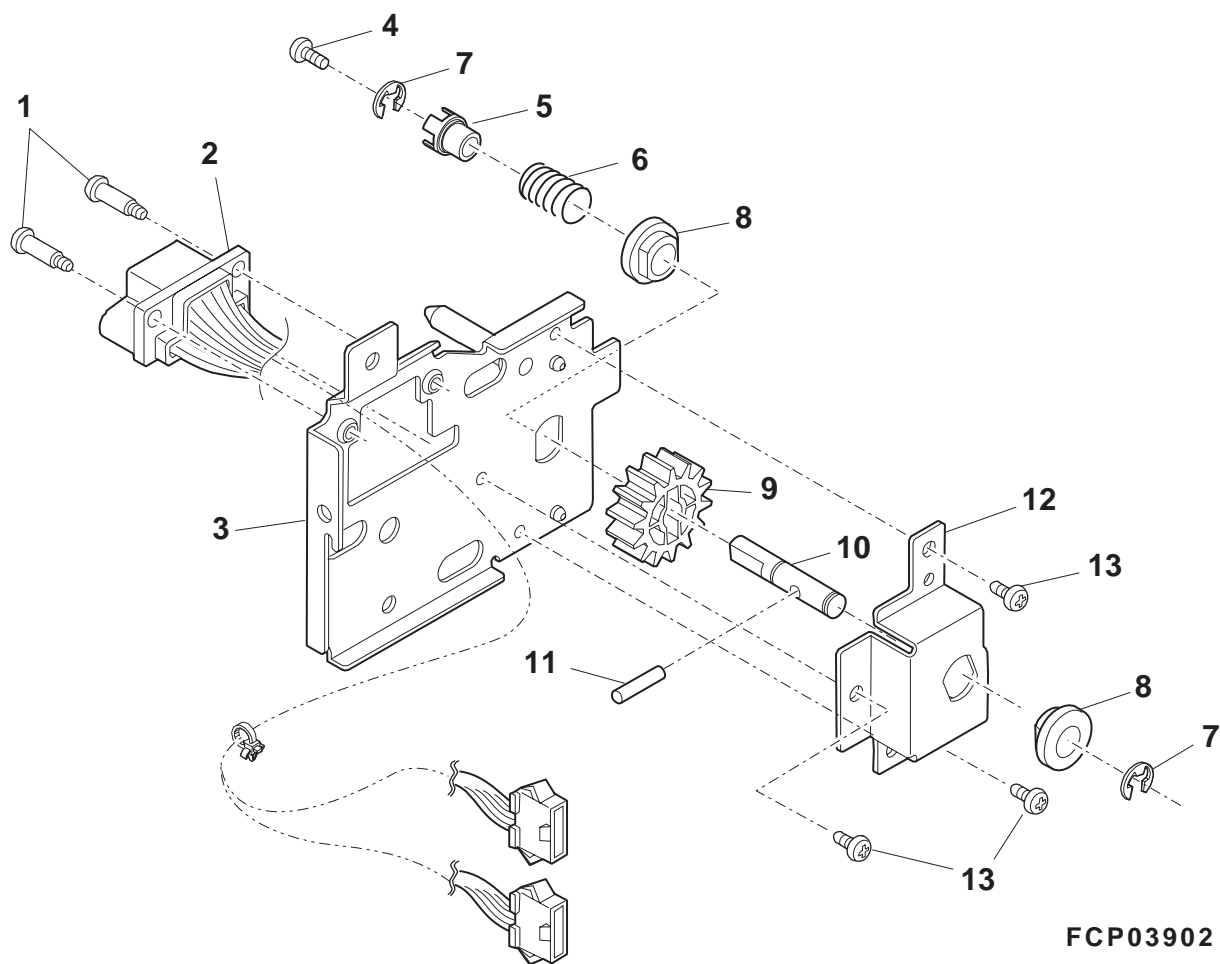


FCP03901

# 28 DV drive unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LX-BZ0843FCZZ	AC		C	Screw
2	DHAI-2828FCZZ	AR		C	DV interface harness [except AR-405,505]
	DHAI-3060FCZZ	AS		C	DV interface harness [AR-405,505]
3	CFRM-0943FC01	AL		C	DV drive frame F
4	LX-BZ0845FCZZ	AC		C	Screw
5	NCPL-0007FCZZ	AC		C	DV cup ring
6	MSPRC2616FCZZ	AC		C	DV drive spring
7	XRESP50-06000	AA		C	E type ring
8	NBRGC0387FCZZ	AB		C	Bearing
9	NGERH1240FCZZ	AD		C	DC drive gear (14T)
10	NSFTZ2448FCZZ	AK		C	DV drive shaft
11	LPINS0278FCZZ	AB		C	Spring pin (φ3-11)
12	LFRM-0944FCZZ	AE		C	DV drive frame R
13	XHBSD30P06000	AA		C	Screw (3×6)
	(Unit)				
901	CFRM-0943FC71	AZ	N	E	DV drive unit [except AR-405,505]
	CFRM-0943FC72	AZ	N	E	DV drive unit [AR-405,505]

# 28 DV drive unit

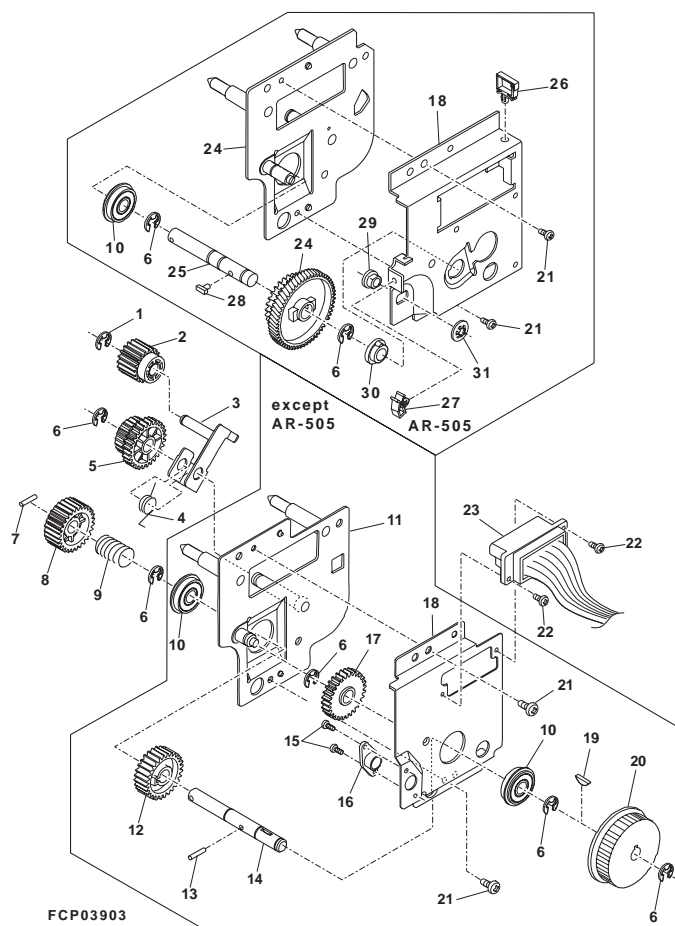




## 29 Fusing drive unit

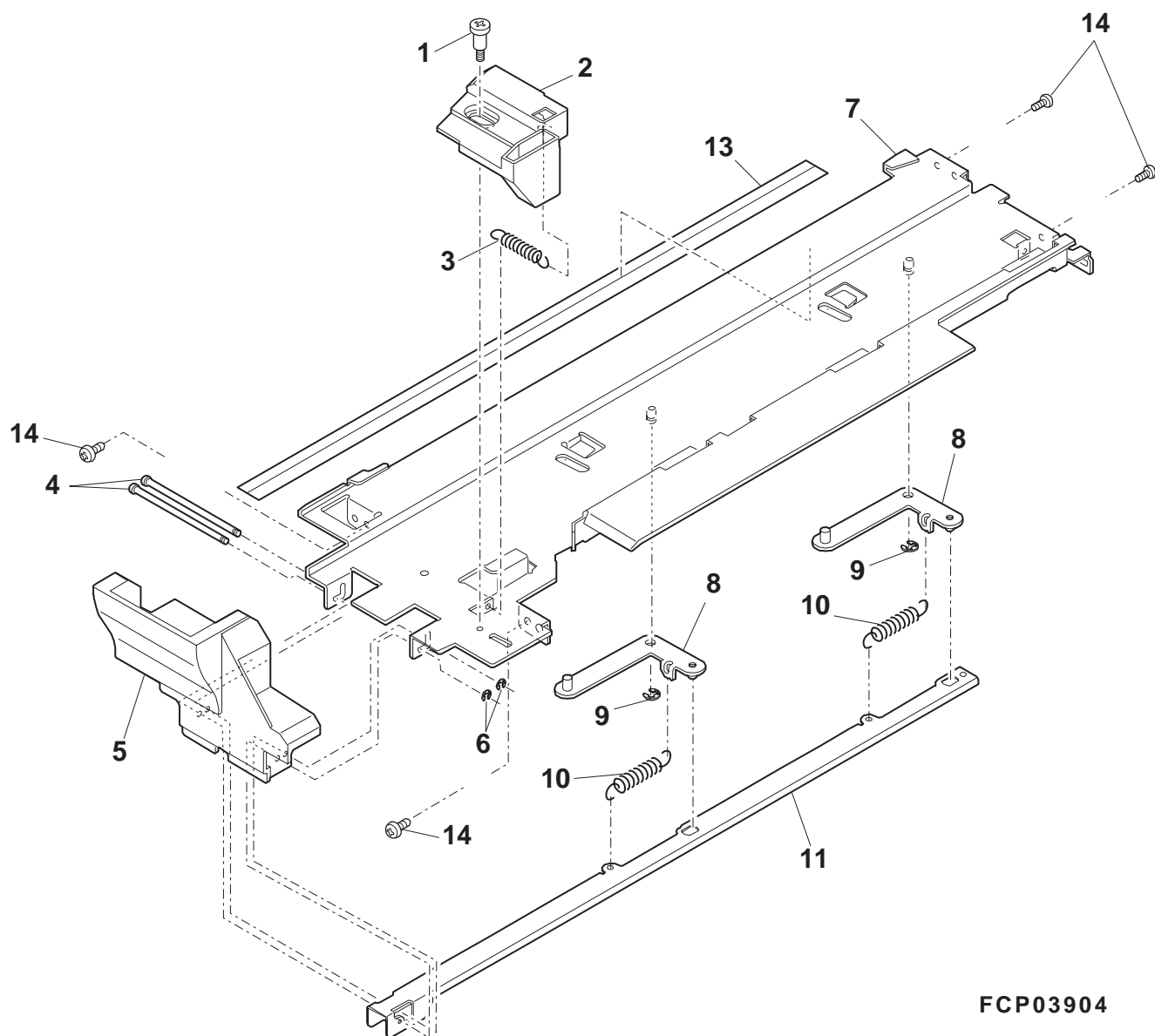
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XRESP50-06000	AA		C	E type ring
2	NGERH1250FCZZ	AD		C	Delivery idle gear (20T)
3	CPLTM5388FC01	AH		C	Delivery drive plate
4	MSPRC2618FCZ1	AC		C	Delivery drive plate spring
5	NGERH1252FCZZ	AD		C	Delivery gear (21T)
6	XRESP70-08000	AA		C	E type ring
7	LX-BZ0670FCZZ	AC		C	Screw (3×8)
8	NGERH1251FCZZ	AD		C	Fusing drive gear (27T)
9	MSPRC2619FCZZ	AC		C	Gear pressure spring
10	NBRGY0131FCZZ	AM		C	Bearing (with M22 E ring)
11	CFRM-0948FC01	AT		C	Fusing drive frame F [except AR-505]
	CFRM-0948FC02	AR	N	C	Fusing drive frame F [AR-505]
12	NGERH1249FCZZ	AD		C	Suction drive gear (29T) [except AR-505]
13	LPIINS0096FCZZ	AB		C	Pin (φ3-12) [except AR-505]
14	NSFTZ2452FCZZ	AL		C	Fusing drive shaft [except AR-505]
15	LX-BZ3008SC0S	AA		C	Screw (3×8) [except AR-505]
16	NBRGP0616FCZZ	AG		C	Bearing [except AR-505]
17	NGERH0349FCZZ	AC		C	Gear (28T)
18	LFRM-0949FCZZ	AL		C	Fusing drive frame R [except AR-505]
	LFRM-1012FCZZ	AL	N	C	Fusing drive frame R [AR-505]
19	LSTPT0138FCZZ	AE		C	Stopper [except AR-505]
20	NPLYZ0202FCZZ	AF		C	Pulley (45T) [except AR-505]
21	XHBSD40P08000	AA		C	Screw (4×8)
22	XBBSD40P12000	AA		C	Screw (4×12)
23	DHAI-2952FC11	BH		C	AC harness (100V series)[AR-280,285,335]
	DHAI-2959FC11	BK		C	AC harness (200V series)[AR-280,285,335]
	DHAI-3097FCZZ	BK		C	AC harness (100V series except Taiwan)[AR-250,281,286,336]
	DHAI-3098FCZZ	BK		C	AC harness (Taiwan only)[AR-250,281,286,336]
	DHAI-2959FC12	BK		C	AC harness (200V series)[AR-250,281,286,336]
	DHAI-3068FCZZ	BK		C	AC harness (40 EX100) (100V series)[AR-405]
	DHAI-3069FCZZ	BA		C	AC harness (40 EX200) (200V series)[AR-405]
	DHAI-3100FCZZ	BA	N	C	AC harness (100V series)[AR-505]
	DHAI-3101FCZZ	BA	N	C	AC harness (200V series)[AR-505]
24	NGERH1339FCZZ	AE	N	C	Fusing drive gear [AR-505]
25	NSFTZ2555FCZZ	AH	N	C	HR drive shaft [AR-505]
26	LHLDW7076SCZZ	AB		C	Cable holder
27	LHLDW1178FCZZ	AB		C	Cable holder
28	LPIINS0263FCZZ	AD		C	T-figure pin [AR-505]
29	NBRGM1040HCZZ	AC		C	Bearing [AR-505]
30	NBRGC2019SCZZ	AC		C	Bearing [AR-505]
31	LX-RZ1017HCZZ	AA		C	fixing ring [AR-505]

## 29 Fusing drive unit



**30** DV guide unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LX-BZ0581FCZZ	AB		C	Screw
2	LSTPP0343FCZZ	AD		C	DV stopper
3	MSPRC2378FCZZ	AC		C	Stopper spring
4	NSFTZ1595FCZZ	AD		C	Shaft G
5	JHNDP0144FCZZ	AK		C	DV guide handle
6	XRESP20-03000	AA		C	E type ring
7	CGIDH1791FC01	AT		C	DV guide
8	CPLTM5419FC01	AH		C	Plate DVB
9	XRESP40-06000	AA		C	E type ring
10	MSPRC2686FCZZ	AC		C	DV guide spring
11	LPLTM5418FCZZ	AH		C	Plate DVA
13	PSHEZ4616FCZZ	AP		C	DV guide sheet
14	XHBSE40P08000	AA		C	Screw (4x8)

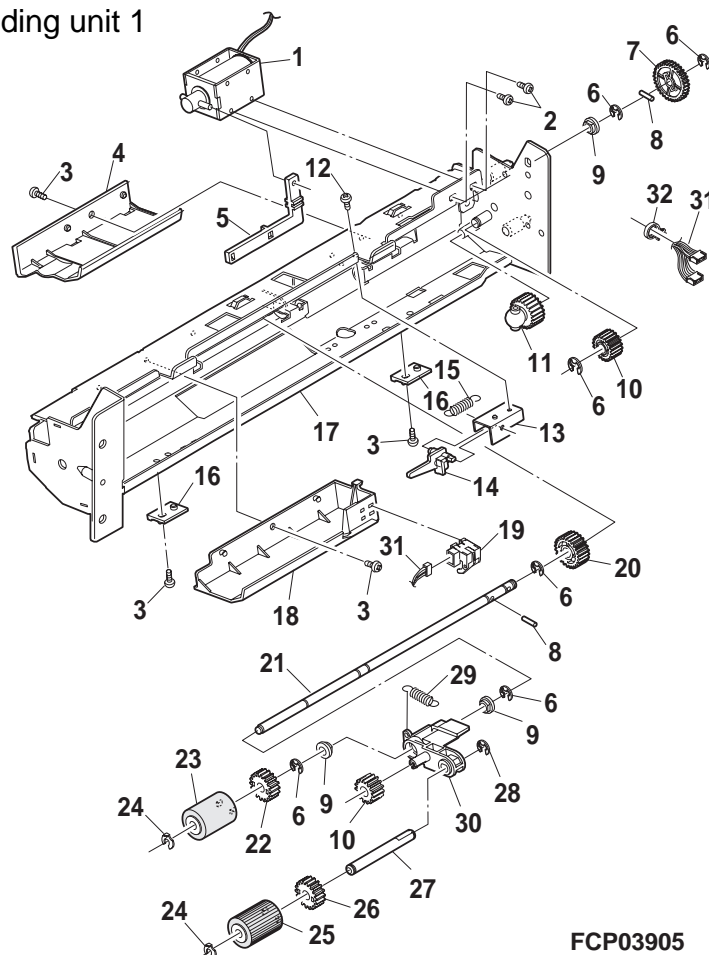
**30** DV guide unit

FCP03904

### 31 Multi manual paper feeding unit 1

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	RPLU-0330FCZZ	AT		B	Pick up solenoid
2	XBPSD30P04000	AA		C	Screw (3×4)
3	XHBSE40P08000	AA		C	Screw (4×8)
4	PGiDM1809FCZZ	AF		C	MF upper paper guide R
5	MARMP0246FCZ1	AE		C	MF slide arm
6	XRESP50-06000	AA		C	E type ring
7	NGERH1258FCZZ	AD		C	Manual paper feeding gear (33T)
8	LPI NS0134FCZZ	AB		C	Pin (φ2-12)
9	NBRGM1040HCZZ	AC		C	Bearing
10	NGERH1259FCZZ	AD		C	Idle gear (20T)
11	NGERH1261FCZZ	AM		C	Joint gear (22T)
12	XHBSD30P06000	AA		C	Screw (3×6)
13	LPLTM5417FCZZ	AD		C	MF rotation arm fixing plate
14	MARMP0247FCZZ	AD		C	MF rotation arm
15	MSPRC2646FCZZ	AB		C	MF arm return spring
16	LDAiU0584FCZZ	AD		C	R door lock block
17	CFRM-0956FC01	AW		C	Manual paper feeding frame
18	PGiDM1808FCZZ	AG		C	MF upper paper guide F
19	QSW-Z0514FCZZ	AP		B	Photo sensor (MPED)
20	NGERH1260FCZZ	AD		C	Idle gear (24T)
21	NSFTZ2468FCZZ	AM		C	MF roller shaft
22	NGERH1262FCZZ	AM		C	Paper feeding roller gear (24T)
23	NRÖLR1241FCZZ	AL		C	Manual feeding roller
24	LSTPP0279FCZZ	AB		C	Stopper
25	NRÖLR1240FCZZ	AL		C	MF pick up roller R
26	NGERH1263FCZZ	AC		C	Pick up roller gear (24T)
27	NSFTZ2472FCZZ	AH		C	MF pick up shaft
28	XRESP40-06000	AA		C	E type ring
29	MSPRC2650FCZZ	AB		C	MF pick up roller
30	MARMP0244FCZZ	AD		C	MF roller arm
31	DHAi-2859FCZZ	AU		C	MF drive harness
32	LBNDJ0013FCZ1	AA		C	Wire band
(Unit)					
901	CFRM-0956FC31	BS		E	Multi manual paper feeding unit

### 31 Multi manual paper feeding unit 1

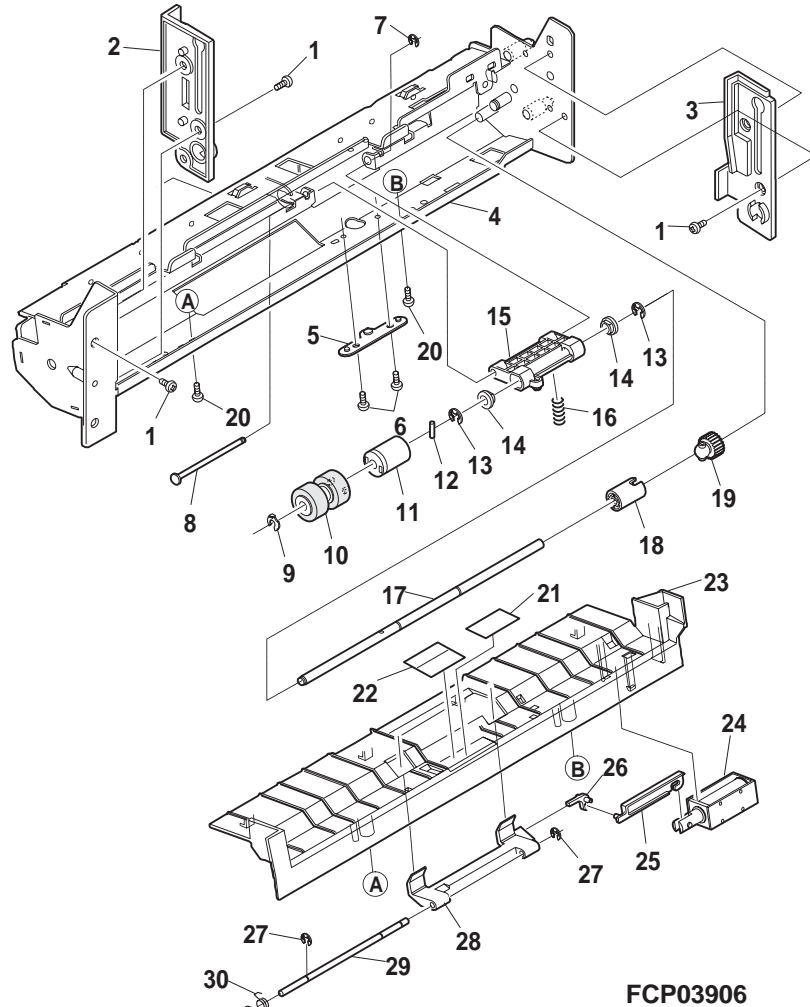


FCP03905

### 32 Multi manual paper feeding unit 2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XHBSE40P08000	AA		C	Screw (4×8)
2	LHLDZ1378FCZZ	AF		C	MF tray holder F
3	LHLDZ1379FCZZ	AF		C	MF tray holder R
4	CFRM-0956FC01	AW		C	Manual paper feeding frame
5	LPLTM5467FCZZ	AD		C	MF pressure spring fixing plate
6	XHBSD30P06000	AA		C	Screw (3×6)
7	XRESP30-05000	AA		C	E type ring
8	NSFTZ2471FCZZ	AH		C	MF reverse holder shaft
9	LSTPP0279FCZZ	AB		C	Stopper
10	NRÖLR1220FCZZ	AL		C	MF reverse holder roller
11	PCLC-0277FCZZ	AS		B	MF clutch
12	XPSSJ20-12000	AA		C	Spring pin (φ2-12)
13	XRESP50-06000	AA		C	E type ring
14	NBRGM1040HCZZ	AC		C	Bearing
15	LHLDZ1358FCZZ	AD		C	MF reverse roller holder
16	MSPRC2645FCZZ	AB		C	MF reverse pressure spring
17	NSFTZ2469FCZZ	AL		C	MF reverse roller shaft
18	PPiPP0199FCZZ	AD		C	Joint pipe
19	NGERH1261FCZZ	AM		C	Joint gear (22T)
20	XEBSD40P12000	AA		C	Screw (4×12)
21	PSHEZ4525FCZZ	AC		C	MF pad sheet
22	PSHEZ4524FCZZ	AC		C	Reverse roller front sheet
23	PGiDM1810FCZZ	AP		C	MF lower paper guide
24	RPLU-0331FCZZ	AR		B	Gate solenoid
25	MARMP0248FCZZ	AE		C	MF gate joint arm
26	MLEVP0764FCZZ	AD		C	MF gate lever
27	XRESP25-04000	AA		C	E type ring
28	PGiDM1811FCZZ	AG		C	MF gate
29	NSFTZ2493FCZ1	AH		C	MF gate shaft
30	MSPRC2647FCZZ	AB		C	MF gate spring
(Unit)					
901	CFRM-0956FC31	BS		E	Multi manual paper feeding unit

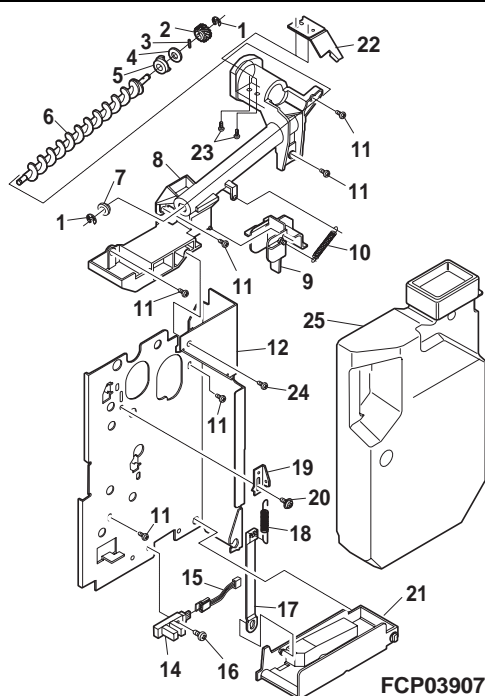
### 32 Multi manual paper feeding unit 2



FCP03906

**33** Waste toner unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XRESP40-06000	AA		C	E type ring
2	NGERH1346FCZZ	AE		C	Waste toner gear B
3	LPIN-0026MCZZ	AA		C	Spring pin (φ2-10)
4	LX-WZ0075FCZZ	AA		C	MB fixing washer
5	NBRGP0321FCZZ	AD		C	Bearing
6	NSRW-0029FCZZ	AH		C	Transport screw
7	NBRGP0322FCZZ	AC		C	Bearing MX
8	PPIP0198FCZZ	AS		C	Waste toner transport pipe
9	PSHT-0075FCZZ	AF		C	Drive shutter
10	MSPRC2625FCZZ	AC		C	shutter spring
11	XHBSE40P08000	AA		C	Screw (4×8)
12	PGIDH1782FCZ1	AQ		C	Bottle guide
14	VHPGP1A22LC-1	AK		B	Photo sensor (GP1A22LC)
15	DHAi-2835FCZZ	AG		C	TFD interface harness
16	XBBS40P12000	AA		C	Screw (4×12)
17	MLEVP0746FCZZ	AE		C	Joint lever
18	MSPRC2624FCZZ	AC		C	Detect spring S
19	LPLTM5394FCZZ	AD		C	SP adjusting plate
20	XBPSD40P08KS0	AA		C	Screw (4×8KS)
21	LDAiU0572FCZZ	AH		C	Bottle support base
22	CPLTM5491FC01	AH		C	Plate spring fixing plate
23	XBBS30P04000	AA		C	Screw (3×4)
24	XEBSD40P08000	AA		C	Screw (4×8)
25	CYOK-0053FC01	AU		D	Waste toner bottle

**33** Waste toner unit

FCP03907

**34** Tray paper feeding unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	NRÖLR1219FCZZ	AL		C	Pick up roller
2	NGERH1263FCZZ	AC		C	Pick up roller gear (24T)
3	NSFTZ2483FCZZ	AE		C	CG pick up roller shaft
4	XRESP50-06000	AA		C	E type ring
5	NGERH1274FCZZ	AC		C	Idle gear (26T)
6	LSTPP0279FCZZ	AB		C	Stopper
7	MLEVP0761FCZZ	AD		C	Pick up roller lever L
8	NRÖLR1218FCZZ	AL		C	Paper feeding roller
9	NGERH1275FCZZ	AM		C	Paper feeding roller gear (24T)
10	MLEVP0762FCZZ	AD		C	Pick up roller lever R
11	XRESP70-08000	AA		C	E type ring
12	NBRGP0549FCZZ	AC		C	Bearing (φ8)
12	NBRGC0167FCZZ	AB		C	Bearing
13	NSFTZ2547FCZZ	AP		C	Paper feeding roller shaft
13	NSFTZ2563FCZZ	AR	N	C	Paper feeding roller shaft
14	MSPRC2658FCZZ	AC		C	PF earth spring
14	MSPRC2589FCZZ	AD		C	PF earth spring
15	VHPGP1A71A1-1	AG		B	Photo sensor (GP1A71A1)
16	MLEVP0588FCZZ	AB		C	Solenoid lever
17	MSPRC2699FCZZ	AC		C	Solenoid lever spring
18	LPINS0317FCZZ	AB		C	Spring pin (φ3-18)
19	MARMP0250FCZZ	AC		C	Solenoid arm

[except AR-505]

[AR-505]

[except AR-505]

[AR-505]

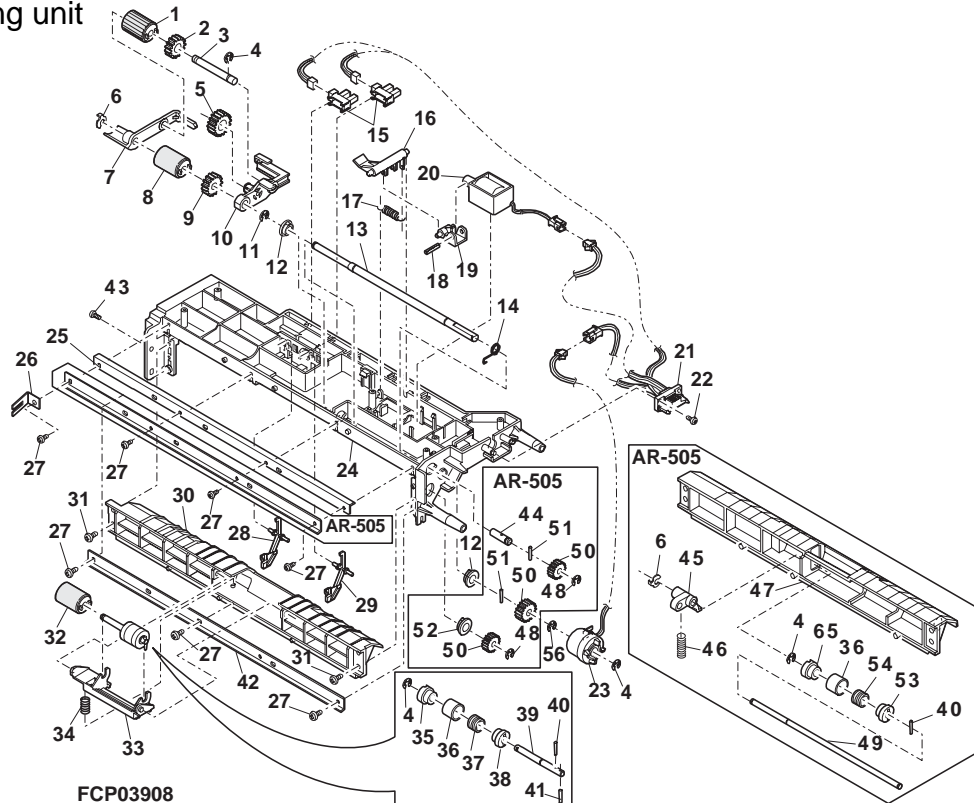
[except AR-505]

[AR-505]

### 34 Tray paper feeding unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
20	RPLU-0327FCZZ	AQ		B	Pick up solenoid
21	DHAI-2049FC11	AQ		C	Paper feeding harness 1.2
22	XEBSD30P12000	AA		C	Screw (3×12)
23	PCLC-0289FCZZ	AV		B	PF clutch [except AR-505]
	PCLC-0295FCZZ	AV	N	B	PF clutch [AR-505]
24	LBRC-0048FCZ2	AQ		C	Main bracket [except AR-505]
	LBRC-0048FCZ3	AQ		C	Main bracket [AR-505]
25	LPLTM4057FCZ1	AH		C	Reinforce plate [except AR-505]
	LPLTM4057FCZ2	AH		C	Reinforce plate [AR-505]
26	MSPRP2362FCZZ	AC		C	Earth spring
27	XEBSD30P08000	AA		C	Screw (3×8)
28	MLEVP0695FCZZ	AC		C	H Paper feeding lever
29	MLEVP0601FCZZ	AC		C	Sensor lever
30	PGIDM1825FCZ1	AN		C	Lower guide [except AR-505]
31	XEBSD40P10000	AA		C	Screw (4×10)
32	NRÖLR1229FCZZ	AL		C	Reverse roller
33	LPLTM5457FCZZ	AE		C	PF pressure plate [except AR-505]
34	MSPRC2674FCZZ	AC		C	Pressure spring [except AR-505]
35	CCLR-0372FC01	AH		C	Collar [except AR-505]
36	PCOVP1142FCZZ	AC		C	Cover
37	MSPRC2382FCZZ	AG		C	Spring [except AR-505]
38	PCLR-0373FCBZ	AD		C	Collar [except AR-505]
39	NSFTZ2484FCZZ	AF		C	Reverse roller shaft [except AR-505]
40	XPSSJ20-15000	AA		C	Spring pin (φ2-15)
41	LPINS0319FCZZ	AB		C	Spring pin (φ2-18) [except AR-505]
42	LPLTM4057FCZZ	AF		C	Reinforce plate [except AR-505]
	LPLTM4057FCZ2	AH		C	Reinforce plate [AR-505]
43	XHBSE40P08000	AA		C	Screw (4×8)
44	LBOSZ2011FCZZ	AB	N	C	Main bracket boss [AR-505]
45	CLEVP0777FC01	AG	N	C	Roller lever [AR-505]
46	MSPRC1943FCZ2	AC		C	Roller lever spring [AR-505]
47	PGIDM1344FCZZ	AM		C	Lower guide [AR-505]
48	XRESP40-06000	AA		C	E ring 4 [AR-505]
49	NSFTZ1765FCZZ	AH		C	Roller shaft [AR-505]
50	NGERH1350FCZZ	AD	N	C	Delivery roller gear (17T) [AR-505]
51	LPINS0165FCZZ	AB		C	Pin (2-8) [AR-505]
52	NBRGC0633FCZZ	AK	N	C	Bearing (φ6) [AR-505]
53	PCLR-0373FCZZ	AC		C	collar [AR-505]
54	MSPRC2345FCZZ	AG		C	Spring [AR-505]
55	CCLR-0372FC02	AM		C	Collar ass'y [AR-505]
56	XRESP70-08000	AA		C	E type ring [except AR-505]
	XRESP50-06000	AA		C	E type ring [AR-505]
	(Unit)				
901	DUNT-6923FCZZ	BM		E	550 Paper feeding unit [except AR-505]
	DUNT-6923FC11	BN	N	E	550 Paper feeding unit [AR-505]

### 34 Tray paper feeding unit

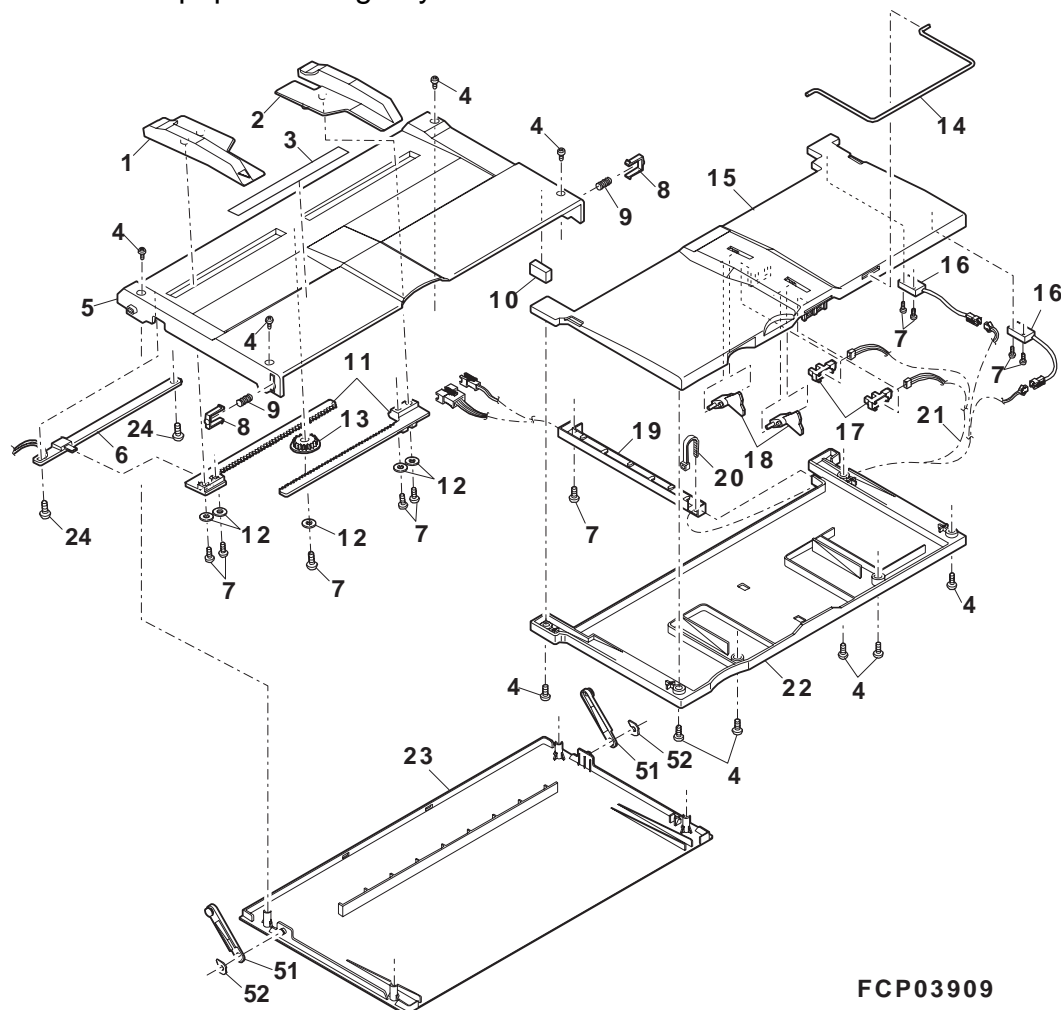




### 35 Multi manual paper feeding tray unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	P G i D M 1 8 0 6 F C Z Z	AE		C	Manual feeding guide F
2	P G i D M 1 8 0 7 F C Z Z	AE		C	Manual feeding guide R
3	T L A B Z 4 2 6 1 F C Z Z	AE		C	Manual feeding size label (Inch series)
	T L A B Z 4 2 6 2 F C Z Z	AE		C	Manual feeding size label (AB series)
4	X E B S E 3 0 P 0 8 0 0 0	AA		C	Screw (3×8)
5	L S O U - 0 1 6 4 F C Z Z	AU		D	Manual feeding tray 1 upper
6	R V R - P 0 0 0 9 F C Z Z	AV		B	MF tray variable resistor
7	X E B S D 3 0 P 0 6 0 0 0	AA		C	Screw (3×6)
8	P T M E - 0 2 7 1 F C Z Z	AD		C	Tray lock pawl
9	M S P R C 2 1 1 4 F C Z Z	AB		D	Lock spring
10	P M A G T 0 0 8 8 F C Z Z	AF		B	MF magnet
11	N G E R R 1 2 7 3 F C Z Z	AD		C	MF tray rack gear
12	X W H S D 3 0 - 0 8 1 0 0	AA		C	Washer
13	N G E R H 1 2 8 2 F C Z Z	AD		D	Multi manual feed gear
14	P G i D W 1 8 2 4 F C Z Z	AC		C	Tray sub guide
15	L S O U - 0 1 6 6 F C Z Z	AS		D	Manual feeding tray 2 upper
16	Q S W - L 0 5 1 5 F C Z Z	AR		B	Lead switch
17	V H P G P 1 A 7 1 A 1 - 1	AG		B	Photo sensor (GP1A71A1)
18	M L E V P 0 7 3 4 F C Z 1	AF		D	Tray sensor lever
19	L H L D Z 1 3 8 4 F C Z Z	AE		C	Harness holder
20	L B N D J 0 0 1 3 F C Z 1	AA		C	Wire band
21	D H A i - 2 8 5 8 F C Z Z	AV		C	MF tray harness
22	L S O U - 0 1 6 7 F C Z Z	AU		D	Manual feeding tray 2 lower
23	L S O U - 0 1 6 5 F C Z 1	AU		D	Manual feeding tray 1 lower
24	X E B S E 3 0 P 0 8 0 0 0	AA		C	Screw (3×8)
51	M A R M P 0 2 4 3 F C Z Z	AD		C	Manual feeding tray arm
52	P R N G P 0 0 8 1 F C Z Z	AA		C	Ring E4
(Unit)					
901	C S O U - 0 1 6 4 F C 3 2	BP		E	Multi manual paper feeding tray unit (Inch series)
	C S O U - 0 1 6 4 F C 3 3	BQ		E	Multi manual paper feeding tray unit (AB series)

### 35 Multi manual paper feeding tray unit

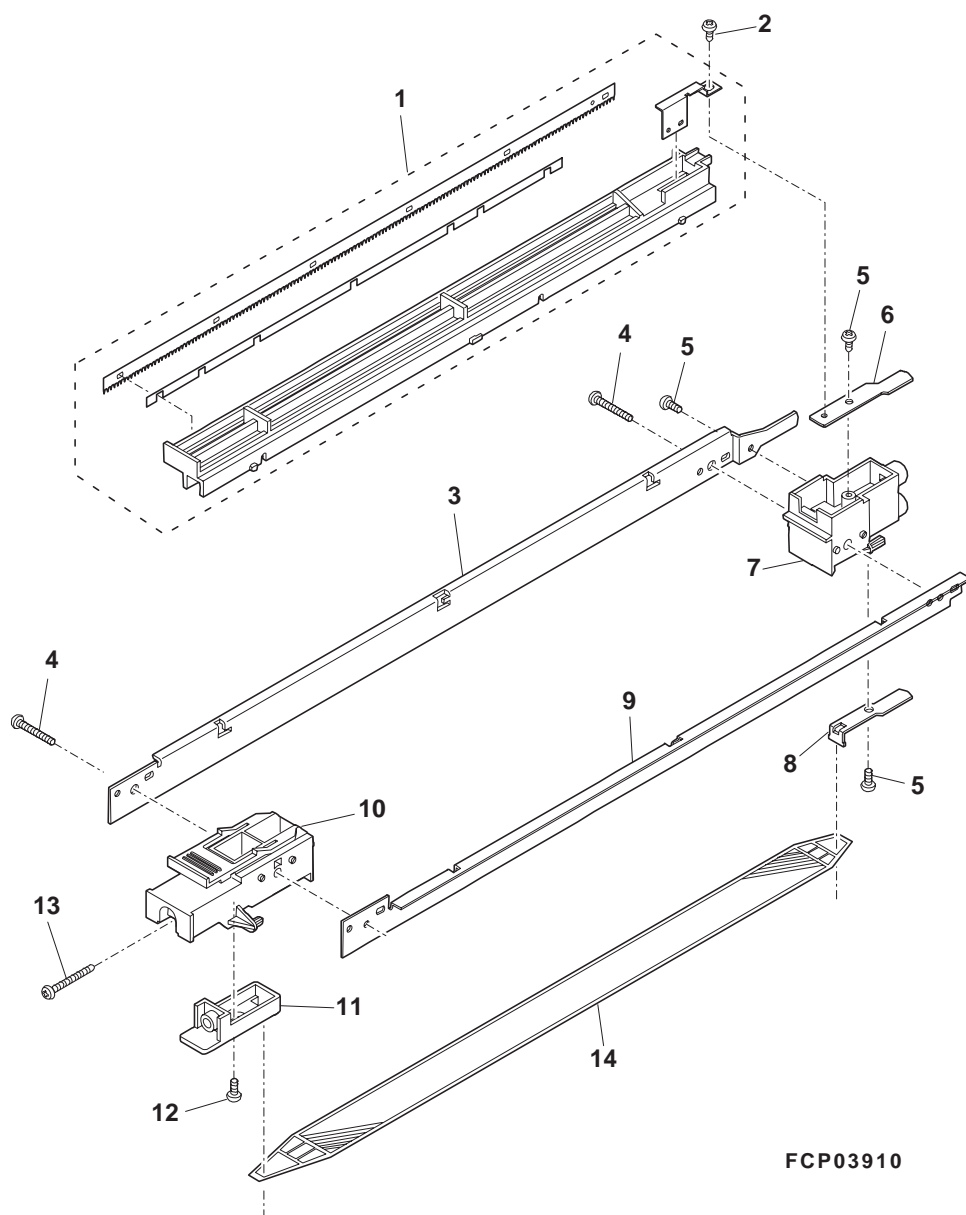


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### 36 MC unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	CPLTM5475FC51	AT		E	Plate unit
2	XBPS230P04000	AA		C	Screw (2.3×4)
3	LPLTM5391FCZZ	AK		C	MC plate L
4	XBPSD40P27000	AA		C	Screw (4×27)
5	XEPSD30P06000	AA		C	Screw (3×6)
6	QSLP-0191FCZZ	AE		C	MC electrode
7	LHLDZ1370FCZZ	AH		C	MC holder R
8	QSLP-0190FCZZ	AE		C	MC grid electrode
9	LPLTM5392FCZZ	AH		C	MC plate R
10	LHLDZ1369FCZZ	AP		C	MC plate F
11	LHLDZ0932FCYZ	AD		C	Grid holder
12	LX-BZ4008SC0M	AA		C	Screw (4×8)
13	XBBSD40P12000	AA		C	Screw (4×12)
14	LPLTM5393FCZZ	AL		C	Grid
	(Unit)				
901	CPLTM5391FC51	BC		E	MC unit

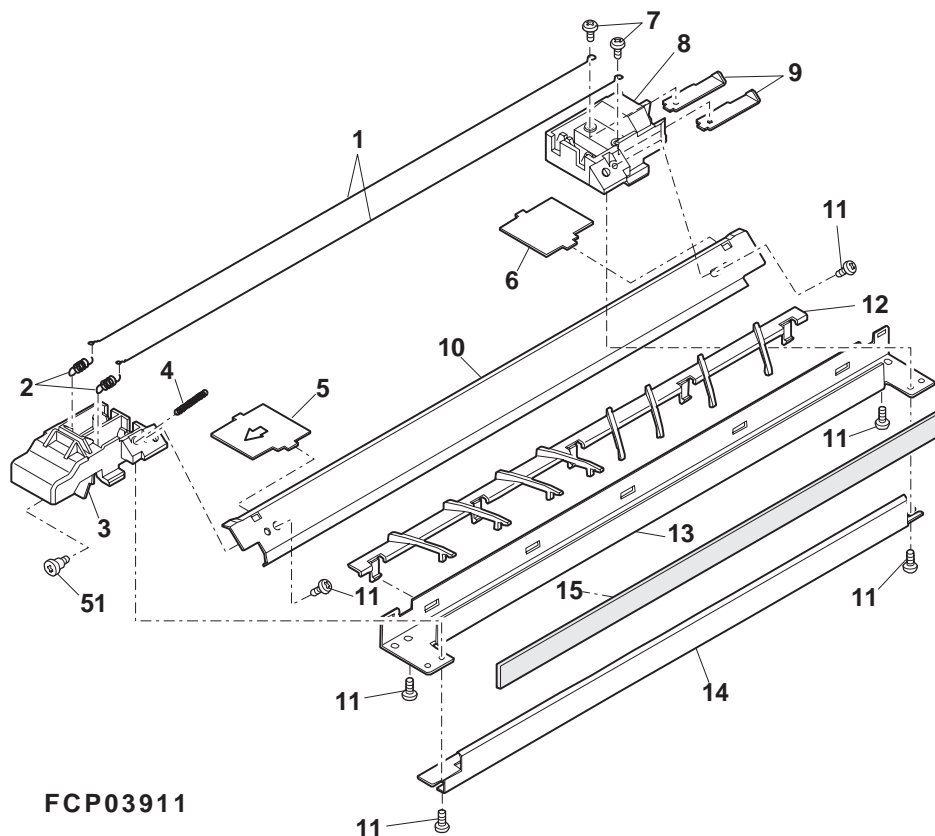
### 36 MC unit





**37** TC unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	PWIR-0188FCZZ	AM	N	B	Charger wire
2	MSPRT0513FCZZ	AA		C	MC tension spring
3	LHLDZ1372FCZZ	AL		C	TC holder F
4	MSPRP1550FCZZ	AA		C	TC spring
5	PCÖVP1436FCZ1	AC		C	Holder cover F
6	PCÖVP1437FCZ1	AC		C	Holder cover R
7	XBPSD30P06000	AA		C	Screw (3×6)
8	LHLDZ1373FCZZ	AK		C	TC holder R
9	QSLP-0193FCZZ	AF		C	TC electrode
10	CGIDH1781FC51	AP		E	TC paper guide unit
11	XEPSD30P06000	AA		C	Screw (3×6)
12	PGIDM1799FCZZ	AL		C	TC transport guide
13	PCASZ0285FCZZ	AL		C	TC case
14	PCASZ0286FCZZ	AK		C	TC sub case
15	PSHEP4664FCZZ	AD		C	TC center sheet
51	LX-BZ0546FCZZ	AC		C	Screw
	(Unit)				
901	CCASZ0285FC51	BC		E	TC unit

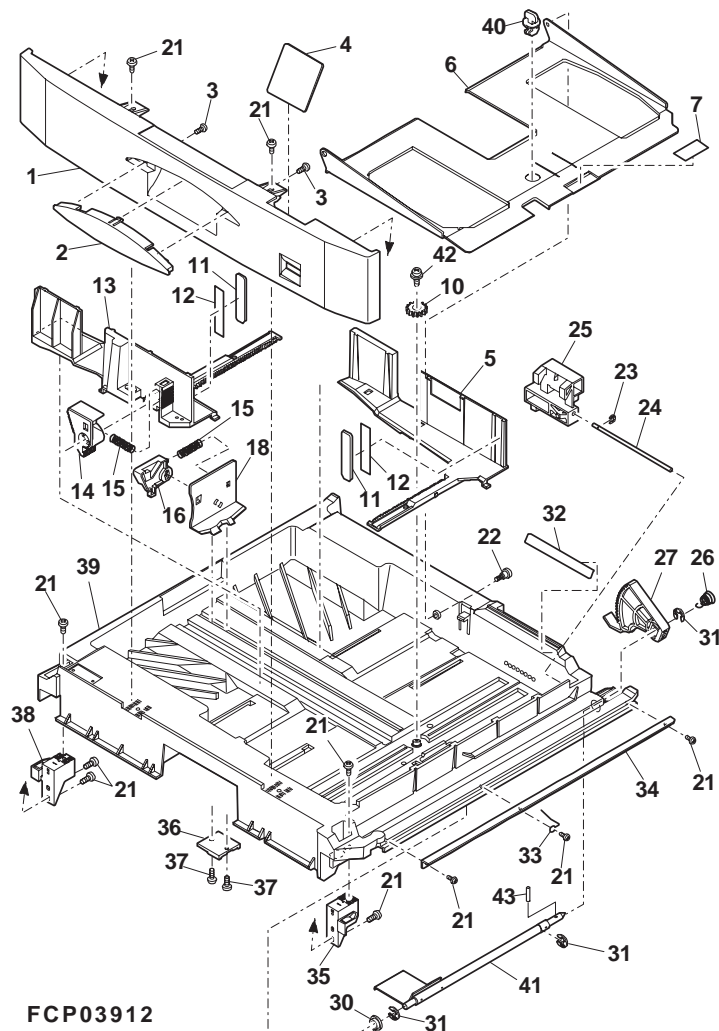
**37** TC unit**38** Tray unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	JHNDP0143FCZZ	AW		C	550 tray handle
2	PCÖVP1451FCZZ	AH		C	Tray handle cover
3	XEBSD30P12000	AA		C	Screw (3×12)
4	LPLTK5492FCZ1	AE		D	Size display plate (AB series)
	LPLTK5492FCZ2	AE		D	Size display plate (Inch series)
5	LPLTP5412FCZZ	AP		C	Side plate R
6	LPLTM5414FCZZ	AS		C	Rotation plate
7	PSHEZ3130FCZZ	AB		C	Rotation plate sheet
8	XEBSD30P08000	AA		C	Screw (3×8)
9	LX-WZ2028SCZZ	AA		C	Washer (φ3-10)
10	NGERH0193FCZZ	AB		C	UC manual feed gear
11	PGIDH1833FCZZ	AC		C	Side plate guide
12	PTPE-0243FCZZ	AD		C	Side plate tape
13	LPLTP5411FCZZ	AQ		C	Side plate F
14	MLEVP0755FCZZ	AG		C	Side plate F lever
15	MSPRC2640FCZZ	AC		C	Side plate F lever spring
16	LPLTP5413FCZZ	AF		C	Rear plate

## 38 Tray unit

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
18	MLEVP0754FCZZ	AF		C	Rear plate lever
19	XBPSD40P08KS0	AA		C	Screw (4×8KS)
20	LPLTM5415FCZZ	AG		C	Lift plate
21	XEBSD40P08000	AA		C	Screw (4×8)
22	LX-BZ0833FCZZ	AC		C	Rotation plate screw
23	LSTPP0314FCZZ	AA		C	E3 stopper
24	NSFTZ2467FCZZ	AF		C	Size detection ratch shaft
25	LDAiU0576FCZZ	AG		C	Size detection block
26	MSPRC2642FCZ1	AB		C	Tray earth spring
27	NGERK1272FCZ1	AF		C	Gear
28	XBBSD40P10000	AA		C	Screw (4×10)
29	NSFTZ2466FCZZ	AR		C	Lift shaft
30	NBRGP0626FCZZ	AC		C	PF bearing (M8)
31	XRESP70-08000	AA		C	E type ring
32	TLABZ4239FCZZ	AD		C	Size display label (AB series, except Taiwan)
	TLABZ4240FCZZ	AD		C	Size display label (Inch series)
	TLABZ4276FCZZ	AD		C	Size display label (Taiwan only)
33	MSPRC2669FCZZ	AB		C	Tray right earth spring
34	LPLTM5416FCZZ	AH		C	Tray reinforce plate right
35	PTME-0272FCZZ	AG		C	Tray pawl right
36	LHLDZ1377FCZZ	AD		C	Rear plate holder
37	LX-BZ0531FCZZ	AA		C	Screw (4×8)
38	PTME-0273FCZZ	AG		C	Tray pawl left
39	GCASP0173FCZZ	BB		D	550 tray case
40	LHLDW1226FCZZ	AB		C	Turn fasner
41	CSFTZ2553FC01	AN		C	Lift shaft
42	LX-BZ0884FCZZ	AB		C	Pinion gear screw
43	LPiNS7062SCZZ	AA		C	Spring pin (φ3-16)
(Unit)					
901	CCASP0173FC32	BP		E	Tray unit (AB series,except Taiwan)
	CCASP0173FC33	BP		E	Tray unit (Inch series)
	CCASP0173FC37	BP		E	Tray unit (Taiwan only)

## 38 Tray unit



## 39 Packing material &amp; Accessories

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	SPAKC5833FCZZ	BD		D	Packing case (For Europe except U.Kingdom)[AR-280]
	SPAKC5833FC11	BD		D	Packing case (For Europe except U.Kingdom)[AR-285]
	SPAKC5833FC12	BD		D	Packing case (For Europe except U.Kingdom)[AR-335]
	SPAKC5748FC13	BD		D	Packing case (Other countries)[AR-280]
	SPAKC5748FC14	BD		D	Packing case (Other countries)[AR-285]
	SPAKC5748FC15	BD		D	Packing case (Other countries)[AR-335]
	SPAKC5981FC11	BC		D	Packing case (USA only)[AR-250]
	SPAKC5982FCZZ	BC		D	Packing case (For Europe except U.Kingdom)[AR-250]
	SPAKC5981FCZZ	BC		D	Packing case (Other countries)[AR-250]
	SPAKC5958FC18	BD		D	Packing case (USA only)[AR-281]
	SPAKC5959FC11	BD		D	Packing case (For Europe except U.Kingdom)[AR-281]
	SPAKC5958FC17	BD		D	Packing case (Other countries)[AR-281]
	SPAKC5958FC20	BD		D	Packing case (USA only)[AR-286]
	SPAKC5959FC12	BD		D	Packing case (For Europe except U.Kingdom)[AR-286]
	SPAKC5958FC19	BD		D	Packing case (Other countries)[AR-286]
	SPAKC5958FC22	BD		D	Packing case (USA only)[AR-336]
	SPAKC5959FC13	BD		D	Packing case (For Europe except U.Kingdom)[AR-336]
	SPAKC5958FC21	BD		D	Packing case (Other countries)[AR-336]
	SPAKC5958FC11	BD		D	Packing case (USA only)
	SPAKC5959FCZZ	BD		D	Packing case (For Europe except U.Kingdom)
	SPAKC5958FCZZ	BD		D	Packing case (Other countries)
	SPAKC6003FC12	BD	N	D	Packing case (for USA)[AR-505]
	SPAKC6004FCZZ	BD	N		Packing case (for Europe except U.Kingdom)[AR-505]
	SPAKC6003FC11	BD	N		Packing case (for other countries)[AR-505]
2	SPAKA5757FCZ1	AW		D	Top packing cushion SPF [AR-280]
	SPAKA5763FCZ1	AW		D	Top packing cushion ADF [AR-285,335]
	SPAKA5983FCZZ	AT		D	Top packing cushion L [AR-250]
	SPAKA5897FCZ1	AT		D	Top packing cushion LSPF [AR-281]
	SPAKA5895FCZ1	AT		D	Top packing cushion LADF [AR-286,336]
	SPAKA5962FCZZ	AT		D	Top packing cushion L [AR-405]
3	SPAKA6006FCZZ	AW	N	D	Top packing cushion L [AR-505]
	PSHEZ2097FCZZ	AF		C	Operation protect sheet
4	UBAGF0050FCZZ	AH		D	Vinyl bag for body
5	SPAKA5984FCZZ	AT		D	Top packing cushion R [AR-250]
	SPAKA5898FCZ1	AT		D	Top packing cushion RSPF [AR-281]
	SPAKA5896FCZ1	AT		D	Top packing cushion RADF [AR-286,336]
	SPAKA5963FCZZ	AT		D	Top packing cushion R [AR-405]
	SPAKA6007FCZZ	AW	N	D	Top packing cushion R [AR-505]
6	SPAKA5903FCZ1	BE		D	Bottom case
7	CPAKA5760FC31	BE		D	Skid unit
8	TCADZ1178FCZZ	AB		D	Caution card
9	LX-WZ0326FCZZ	AA		C	Washer for MB cushion
10	LX-BZ0787FCZZ	AH		C	Screw for 2/3 mirror lock
11	SPAKA5210FCZZ	AF		D	Tray protect packing cushion [AR-285,335,286,336]
12	SPAKA5732FCZZ	AG		D	ADF protect sheet [AR-285,335,286,336]
13	SPAKA5758FCZZ	AD		D	SPF protect sheet [AR-280,281]
14	SPAKA5759FCZZ	AD		D	SPF protect packing cushion [AR-280,281]
17	TCADZ1275FCZZ	AB		D	Tray caution card
19	LHLDW1226FCZZ	AB		C	Turn fasner
	DUNT-6946FC11	DB		E	RADF unit (Inch series)[AR-285,335]
	DUNT-6946FC12	DC		E	RADF unit (AB series)[AR-285,335]
	CSOU-0159FC39	BN		E	RADF tray unit (Inch series·USA,Canada)[AR-286,336]
	CSOU-0159FC41	BP		E	RADF tray unit IN13 (Inch series·Except USA,Canada)[AR-286,336]
	CSOU-0159FC40	BN		E	RADF tray unit (AB series·For Europe)[AR-286,336]
	DUNT-6946FC12	DC		E	RADF unit (AB series)[AR-286,336]
	CSOU-0159FC42	BP		E	RADF tray unit AB13 (AB series·Except Europe)[AR-286,336]
	DUNT-6918FC22	DC		E	RADF unit (AB series)[AR-405]
	DUNT-6946FC11	DB		E	RADF unit (Inch series)[AR-286,336]
	CSOU-0159FC39	BN		E	RADF tray unit (Inch series,for USA,Canada)[AR-405]
	DUNT-6918FC21	DC		E	RADF unit (Inch series)[AR-405]
	CSOU-0159FC41	BP		E	RADF tray unit IN13 (Inch series, for except USA,Canada)[AR-405]
	CSOU-0159FC40	BN		E	RADF tray unit (ABseries)[AR-285,335]
	CSOU-0159FC40	BN		E	RADF tray unit (ABseries, for Europe)[AR-405]
	CSOU-0159FC39	BN		E	RADF tray unit (Inch series)[AR-285,335]
	CSOU-0159FC42	BP		E	RADF tray unit AB13 (ABseries, except for Europe)[AR-405]
20	DUNT-6936FC11	CK		E	SPF unit (Inch series)[AR-280]
	DUNT-6936FC11	CK		E	SPF unit (Inch series)[AR-281]
	DUNT-6936FC12	CK		E	SPF unit (AB series)[AR-280]
	DUNT-6936FC12	CK		E	SPF unit (AB series)[AR-281]
24	CYOK-0053FC01	AU		D	Waste toner bottle
	CYOK-0053FC01	AU		D	Waste toner bottle
30	SSAKA2440QCZZ	AB		D	Vinyl bag (280×410mm)
	SSAKA2440QCZZ	AB		D	Vinyl bag (280×410mm)
32	CCASZ0067FC01	AD		D	Maintenance card
	CCASZ0067FC01	AD		D	Maintenance card
33	UKOGZ0002FCZZ	AD		D	Vinyl gloves
34	UYOK-0011FCZZ	AA		D	Vinyl bag
35	PSHEZ1394FCZZ	AC		D	Vinyl sheet
36	TCADS0649FCZZ	AM		D	Card (For Europe)
	TCADZ2001QCZA	AE		D	Card (Australia only)

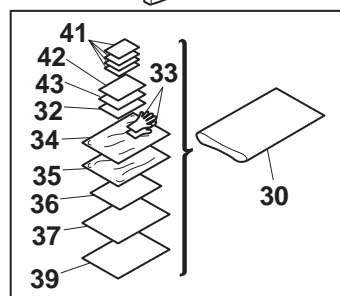
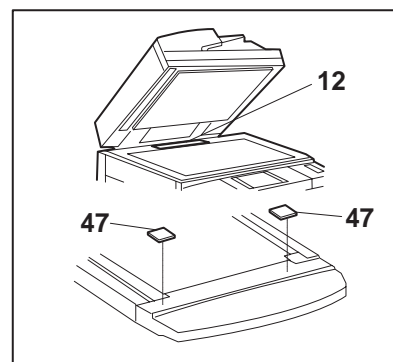
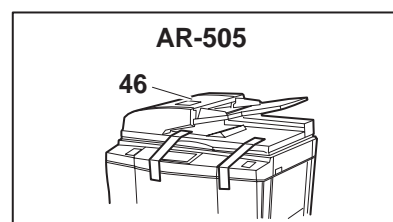
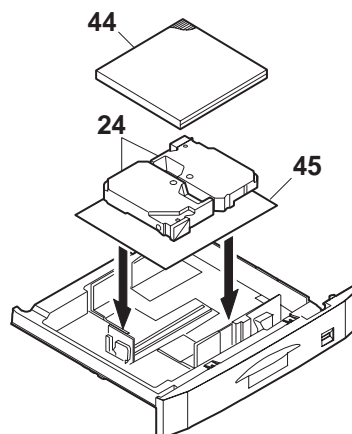
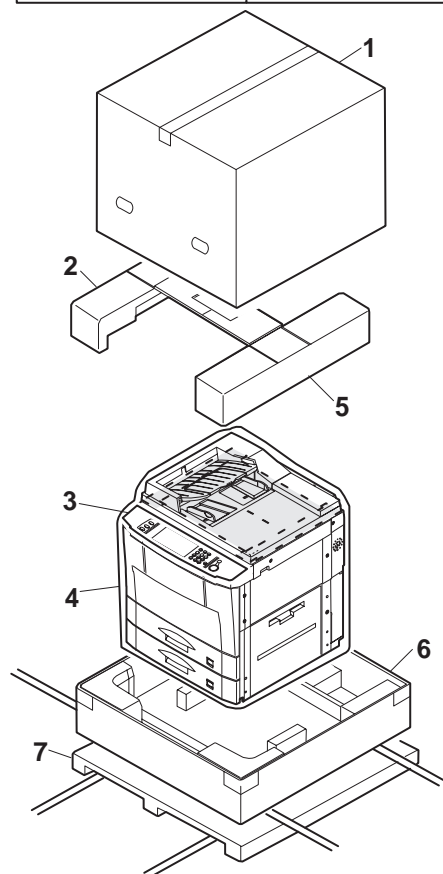
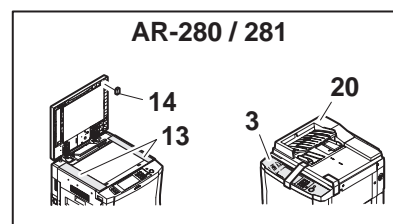
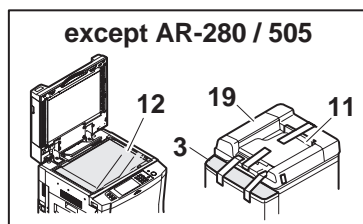
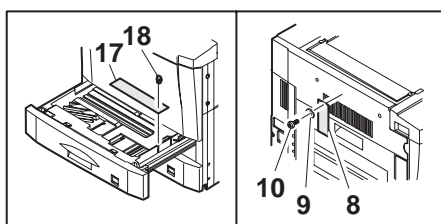
## 39 Packing material &amp; Accessories

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
37	C I N S E 1 8 6 4 F C 5 1	BF		D	Operation manual for copy (USA only)[AR-250]
	C I N S W 1 8 5 9 F C 5 1	BE		D	Operation manual for copy (Swedish) [AR-281,286,336]
	C I N S E 1 8 6 6 F C 5 2	BA	N	D	Operation manual for copy (English) [AR-250]
	C I N S R 1 8 6 0 F C 5 1	BE		D	Operation manual for copy (Russian) (Russia only)[AR-281,286,336]
	C I N S E 1 8 6 9 F C 5 1	BB		D	Operation manual for copy (English)(U.Kingdom) [AR-250]
	C I N S G 1 8 6 8 F C 5 1	BE		D	Operation manual for copy (German) [AR-250]
	C I N S Z 1 8 6 1 F C 5 1	BE		D	Operation manual for copy (Arabic) [AR-281,286,336]
	C I N S F 1 8 6 7 F C 5 2	BE	N	D	Operation manual for copy (French) [AR-250]
	T I N S E 1 8 2 9 F C Z 1	AY		D	Operation manual for copy (USA only)[AR-405]
	C I N S E 1 8 3 0 F C 5 3	BF	N	D	Operation manual for copy (English) (Except U.Kingdom)[AR-405]
	C I N S S 1 8 7 0 F C 5 1	BE	N	D	Operation manual for copy (Spanish) [AR-250]
	C I N S E 1 8 3 1 F C 5 2	BF		D	Operation manual for copy (English) (U.Kingdom)[AR-405]
	C I N S i 1 8 7 1 F C 5 1	BE	N	D	Operation manual for copy (Italian) [AR-250]
	C I N S G 1 8 3 2 F C 5 2	BF		D	Operation manual for copy (German) (Germany)[AR-405]
	C I N S H 1 8 7 2 F C 5 1	BE	N	D	Operation manual for copy (Dutch) [AR-250]
	C I N S F 1 8 3 3 F C 5 3	BF	N	D	Operation manual for copy (French) (Canada)[AR-405]
	C I N S W 1 8 7 3 F C 5 1	BE	N	D	Operation manual for copy (Swedish) [AR-250]
	C I N S R 1 8 7 4 F C 5 1	BE	N	D	Operation manual for copy (Russian) (Russia only)[AR-250]
	C I N S S 1 8 3 4 F C 5 2	BF		D	Operation manual for copy (Spanish) (Spanish area)[AR-405]
	C I N S i 1 8 3 5 F C 5 2	BF		D	Operation manual for copy (Italian) (Italian area)[AR-405]
	C I N S Z 1 8 7 5 F C 5 1	BE	N	D	Operation manual for copy (Arabic) [AR-250]
	C I N S H 1 8 3 6 F C 5 2	BF		D	Operation manual for copy (Dutch) (Dutch area)[AR-405]
	T I N S E 1 6 9 6 F C Z Z	AY		D	Operation manual for copy (USA only)[AR-280,285,335]
	C I N S W 1 8 3 7 F C 5 2	BF		D	Operation manual for copy (Swedish)[AR-405]
	T I N S E 1 6 9 7 F C Z Z	BA		D	Operation manual for copy (English) (Except U.Kingdom)[AR-280,285,335]
	C I N S R 1 8 3 8 F C 5 1	BF		D	Operation manual for copy (Russian) (Russia only)[AR-405]
	T I N S E 1 7 3 2 F C Z Z	BB		D	Operation manual for copy (English) (U.Kingdom)[AR-280,285,335]
	C I N S Z 1 8 3 9 F C 5 1	BF		D	Operation manual for copy (Arabic)[AR-405]
	T I N S G 1 7 3 1 F C Z Z	BF		D	Operation manual for copy (German) (Germany)[AR-280,285,335]
	C I N S E 1 9 0 1 F C 5 1	AY	N	D	Operation manual for copy (English) (USA)[AR-505]
	T I N S F 1 6 9 8 F C Z Z	BF		D	Operation manual for copy (French) (Canada)[AR-280,285,335]
	C I N S E 1 9 0 3 F C 5 1	BA	N	D	Operation manual for copy (English) (except USA,U.Kingdom,Australia,Russia and Spanish area)[AR-505]
	T I N S S 1 7 3 5 F C Z Z	BF		D	Operation manual for copy (Spanish) [AR-280,285,335]
	C I N S F 1 9 0 4 F C 5 1	BF	N	D	Operation manual for copy (French) (Canada)[AR-505]
	T I N S i 1 7 3 6 F C Z Z	BF		D	Operation manual for copy (Italian) [AR-280,285,335]
	T I N S H 1 7 3 7 F C Z Z	BF		D	Operation manual for copy (Dutch) [AR-280,285,335]
	C I N S E 1 9 0 6 F C 5 1	BF	N	D	Operation manual for copy (English) (U.Kingdom)[AR-505]
	T I N S W 1 7 3 8 F C Z Z	BF		D	Operation manual for copy (Swedish) [AR-280,285,335]
	C I N S S 1 9 0 7 F C 5 1	BF	N	D	Operation manual for copy (Spanish) (Spanish area)[AR-505]
	T I N S R 1 7 3 4 F C Z Z	BF		D	Operation manual for copy (Russian) (Russia only)[AR-280,285,335]
	C I N S E 1 8 5 0 F C 5 1	AZ		D	Operation manual for copy (USA only) [AR-281,286,336]
	C I N S E 1 8 5 2 F C 5 2	BA	N	D	Operation manual for copy (English) [AR-281,286,336]
	C I N S E 1 8 5 5 F C 5 1	BB		D	Operation manual for copy (English)(U.Kingdom) [AR-281,286,336]
	T I N S Z 1 7 3 3 F C Z Z	BF		D	Operation manual for copy (Arabic) [AR-280,285,335]
	C I N S G 1 8 5 4 F C 5 1	BE		D	Operation manual for copy (German) [AR-281,286,336]
	C I N S F 1 8 5 3 F C 5 2	BE	N	D	Operation manual for copy (French) [AR-281,286,336]
	C I N S S 1 8 5 6 F C 5 1	BE		D	Operation manual for copy (Spanish) [AR-281,286,336]
	C I N S i 1 8 5 7 F C 5 1	BE		D	Operation manual for copy (Italian) [AR-281,286,336]
	C I N S H 1 8 5 8 F C 5 1	BE		D	Operation manual for copy (Dutch) [AR-281,286,336]
	C I N S Z 1 9 1 2 F C 5 1	BL	N	D	Operation manual for copy (Arabic) (Saudi arabia)[AR-505]
39	C I N S E 1 8 6 5 F C 5 1	BF		D	Operation manual for Key (USA only)[AR-250]
	T I N S E 1 7 0 5 F C Z Z	AN		D	Operation manual for Key (USA only)[AR-280,285,335]
	C I N S E 1 8 5 1 F C 5 1	AN		D	Operation manual for Key (USA only)[AR-281,286,336]
	T I N S E 1 8 4 0 F C Z Z	AN		D	Operation manual for Key (USA only)[AR-405]
41	C I N S E 1 9 0 2 F C 5 1	AP	N	D	Operation manual for Key (USA only)[AR-505]
	P S H E Z 4 5 5 5 F C Z Z	AH		C	Panel sheet (English) (Canada,Germany)[AR-280,285,335]
	P S H E Z 4 7 1 5 F C Z Z	AE		C	Panel sheet B (Dutch) (Dutch area)[AR-405]
	P S H E Z 4 5 5 6 F C Z Z	AH		C	Panel sheet (German) (Germany only)[AR-280,285,335]
	P S H E Z 4 7 1 6 F C Z Z	AE		C	Panel sheet (Swedish) (Swedish area)[AR-405]
	P S H E Z 4 5 5 7 F C Z Z	AH		C	Panel sheet (French) (Canada only)[AR-280,285,335]
	P S H E Z 4 7 1 0 F C B Z	AE	N	C	Panel sheet B (English) (Canada,Germany)[AR-505]
	P S H E Z 4 7 1 1 F C B Z	AE	N	C	Panel sheet B (German) (Germany)[AR-505]
	P S H E Z 4 7 2 6 F C Z Z	AH		C	Panel sheet (English) [AR-250,281,286,336]
	P S H E Z 4 7 1 2 F C B Z	AE	N	C	Panel sheet B (French) (Canada only)[AR-505]
	P S H E Z 4 7 2 7 F C Z Z	AH		C	Panel sheet (German) (Germany)[AR-250,281,286,336]
	P S H E Z 4 7 1 3 F C B Z	AE	N	C	Panel sheet B (Spanish) (Spanish area)[AR-505]
	P S H E Z 4 7 2 8 F C Z Z	AH		C	Panel sheet (French) (Canada)[AR-250,281,286,336]
	P S H E Z 4 7 1 4 F C B Z	AE	N	C	Panel sheet B (Italian) (Italian area)[AR-505]
	P S H E Z 4 7 2 9 F C Z Z	AH		C	Panel sheet (Spanish) [AR-250,281,286,336]
	P S H E Z 4 7 0 3 F C Z Z	AK		C	Panel sheet (English) (Canada,Germany)[AR-405,505]
	P S H E Z 4 7 1 5 F C B Z	AE	N	C	Panel sheet B (Dutch) (Dutch area)[AR-505]
	P S H E Z 4 7 0 4 F C Z Z	AK		C	Panel sheet (German) (Germany only)[AR-405,505]
	P S H E Z 4 7 1 6 F C B Z	AE	N	C	Panel sheet B (Swedish) (Swedish area)[AR-505]
	P S H E Z 4 7 0 5 F C Z Z	AK		C	Panel sheet (French) (Canada only)[AR-405,505]
	P S H E Z 4 7 0 6 F C Z Z	AK		C	Panel sheet (Spanish) [AR-405,505]
	P S H E Z 4 7 0 7 F C Z Z	AK		C	Panel sheet (Italian) [AR-405,505]
	P S H E Z 4 7 0 8 F C Z Z	AK		C	Panel sheet (Dutch) [AR-405,505]
	P S H E Z 4 7 0 9 F C Z Z	AK		C	Panel sheet (Swedish) [AR-405,505]
	P S H E Z 4 5 6 2 F C Z Z	AE		C	Panel sheet B (English) (Canada,Germany)[AR-280,285,335]
	P S H E Z 4 5 6 3 F C Z Z	AE		C	Panel sheet B (German) (Germany only)[AR-280,285,335]

### 39 Packing material & Accessories

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
41	PSHEZ4564FCZZ	AE		C	Panel sheet B (French) (Canada only)[except AR-405,505]
	PSHEZ4562FCZZ	AE		C	Panel sheet B (English) (Canada,Germany)[AR-250,281,286,336]
	PSHEZ4563FCZZ	AE		C	Panel sheet B (German) (Germany)[AR-250,281,286,336]
	PSHEZ4565FCZZ	AE		C	Panel sheet B (Spanish) [AR-250,281,286,336]
	PSHEZ4710FCZZ	AE		C	Panel sheet B (English) (Canada,Germany)[AR-405]
	PSHEZ4711FCZZ	AE		C	Panel sheet B (German) (Germany only)[AR-405]
	PSHEZ4712FCZZ	AE		C	Panel sheet B (French) (Canada only)[AR-405]
	PSHEZ4713FCZZ	AE		C	Panel sheet (Spanish) (Spanish area)[AR-405]
42	PSHEZ4714FCZZ	AE		C	Panel sheet (Italian) (Italian area)[AR-405]
	TCADS0764FCZZ	AE		D	Warranty resist card (U.Kingdom only)
43	TCADS0764FCZZ	AE		D	Warranty resist card (U.Kingdom only)
	TCADZ1400FCZZ	AE		D	MSDS card (USA,Canada,U.Kingdom)[AR-280,285,335]
	TCADZ1442FCZZ	AE		D	MSDS card (USA,Canada,U.Kingdom)[AR-280,281,286,336]
	TCADZ1434FCZZ	AE		D	MSDS card (USA,Canada,U.Kingdom)[AR-405]
	TCADZ0027YSZZ	AE	N	D	MSDS card (USA,Canada,U.Kingdom)[AR-505]
44	SPAKA5886FCZ1	AE		D	Accessories spacer
45	SPAKA5210FCZZ	AF		D	Protect sheet
46	PPiPP0200FCZZ	AN		C	Pipe
47	SPAKA6065FCZZ	AD	N	D	Protector A [AR-505]
48	SPAKA6066FCZZ	AD	N	D	Protector B [AR-505]
49	SPAKA4527FCZZ	AD		C	ADF protection sheet [AR-505]
101	SSAKA3001CCZZ	AA		D	Vinyl bag for AC cord (140×360mm)
102	SPAKA5994FCZZ	AF		D	Delivery protection packing cushion

### 39 Packing material & Accessories



FCP03913

## 40 PCU PWB(except for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	V H i 2 8 F 0 8 1 - 0 1 F	BD		E	PCU FLASH PWB (28F081-01F) [AR-280,285,335][for SOCKET1]
	V H i 2 8 F 0 8 1 - 1 3 F	BF		E	PCU FLASH PWB (28F081-13F) [AR-250,281,286,336][for SOCKET1]
	V H i 2 8 F 0 8 1 - 0 6 F	BF		B	PCU FLASH PWB (28F081-06F) [AR-405][for SOCKET1]
2	QCNCM0964FCZZ	AG		C	Connector (24Pin) [CN1]
3	QCNCM0965FCZZ	AG		C	Connector (26Pin) [CN2,7]
4	QCNCM0966FCZZ	AG		C	Connector (30Pin) [CN10]
5	QCNCM0967FCZZ	AG		C	Connector (32Pin) [CN5,9,11]
6	QCNCM0996FCZZ	AF		C	Connector (20Pin) [CN4]
7	QCNCM7014SC0i	AB		C	Connector (9pin) [CN6]
8	QCNCM7014SC1C	AC		C	Connector (13pin) [CN3]
9	QCNCW0382FCZZ	AE		C	Connector (34pin) [CN8]
10	QCNCW0885FCZZ	AG		C	Connector (1-171825-2) [CN12]
11	QSOCZ0071FCZZ	AP		C	Socket (MM20-72B1-1) [AR-405][SOCKET1]
12	R CRS - 0 0 1 0 FCZZ	AK		B	Crystal (9.83MHz) [AR-405][X1]
13	RMPTW4103QCJJ	AB		B	Block resistor (10KΩ×4 1/32W ±5%) [BR1~12,14~30,34,37,38]
14	RMPTW4122QCJJ	AB		B	Block resistor (1.2KΩ×4 1/32W ±5%) [BR35]
15	RMPTW4222QCJJ	AB		B	Block resistor (2.2KΩ×4 1/32W ±5%) [BR33]
16	RMPTW4472QCJJ	AB		B	Block resistor (4.7KΩ×4 1/32W ±5%) [BR31,32,36]
17	VCCCTV1HH220J	AA		C	Capacitor (50WV 22PF) [C308,311]
18	VCEAGU1AW476M	AA		C	Capacitor (10WV 47μF) [C5,13]
19	VCEAGA1AW477M	AB		C	Capacitor (10WV 470μF) [C7]
20	VCEAGA1CW477M	AB		C	Capacitor (16WV 470μF) [C6]
21	VCEAGA1HW224M	AA		C	Capacitor (50WV 0.22μF) [C10,11]
22	VCEAGU1HW335M	AA		C	Capacitor (50WV 3.3μF) [C8]
23	VCEAGA1VW106M	AA		C	Capacitor (35WV 10μF) [C1,3,12]
24	VCEAGU1VW476M	AB		C	Capacitor (35WV 47μF) [C4]
25	VCEAZA1AW226M	AB		C	Capacitor (10WV 22μF) [C9]
26	VCEAZU1VW477M	AD		C	Capacitor (35WV 470μF) [C2]
27	VCKYTV1HB101K	AA		C	Capacitor (50WV 100pF) [C344,345]
28	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C214~233,235~238,240~243,245~248,255~274]
	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C276~279,281~284,286~289,298]
	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C300~303,312,313,323~326,329~336,343,346]
	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C347,352]
29	VCKYTV1HB222K	AA		C	Capacitor (50WV 2200pF) [C206,207]
30	VCKYTV1HB471K	AA		C	Capacitor (50WV 470pF) [C200,201]
31	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C202~205,208~213,234,239,244,249,253,254,275,280,285,290~296,299]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C304~307,309,310,314~322,327,328,337~342]
32	VCCYNU1HM103K	AA		C	Capacitor (50WV 0.010μF) [C297]
33	VHDDAN202K/-1	AB		B	Diode (DAN202K) [D200,201,207~211,213,214,216]
34	VHDDAP202K/-1	AB		B	Diode (DAP202K) [D203~206,215]
35	VHDDSM1D1/-1	AB		B	Diode (DSM1D1) [D1~4]
36	VHDMA704A/-1	AC		B	Diode (MA704A) [D202,212]
37	VHEHZZS5B3/-V	AB		B	Zener diode (HZS5B3) [ZD4]
38	VHEHZZS5CLL/-1	AC		B	Zener diode (HZS5CLL) [ZD2,3]
39	VHERD22FB/-1	AD		B	Zener diode (RD22FB) [ZD1]
40	VHiHD6413003T	BA		B	IC (HD3413003T) [IC29]
41	VHiHG71C254-1	AZ		B	IC (HG71C254) [IC33]
42	VHiH256-20-8A	AY		B	IC (IDT71256SA20Y) [IC25,28,30,35]
43	VHiLM324NS/-S	AC		B	IC (LM324NS) [IC23,31]
44	VHiLM339NS/-1	AD		B	IC (LM339NS) [IC24,45]
45	VHiM66500FP-1	AT		B	IC (M66500FP) [IC26]
46	VHiSLA7024MT/-	AS		B	IC (SLA7024MT) [IC4]
47	VHiSN74HC138S	AE		B	IC (SN74HC138S) [IC17]
48	VHiSN74HC151S	AG		B	IC (SN74HC151S) [IC11~14,18~21]
49	VHiSTA401A/-1	AP		B	IC (STA401A) [IC8]
50	VHiTA7291S/-1	AF		B	IC (TA7291S) [IC1,7,32]
51	VHiTD62003AP1	AG		B	IC (TD62003AP1) [IC2,3,5,6,9,10,22,27,43,44]
52	VHiTD62504F-1	AF		B	IC (TD62504F) [IC38,40~42]
53	VHiTE7752/-1	AX		B	IC (TE7752) [IC15]
54	VHi74LV32NS-1	AE		B	IC (74LV32NS) [IC36]
55	VHi74VHCT04-1	AF		B	IC (74VHCT04) [AR-405][IC34,39]
56	VHPGL3PR8/-1	AA		B	Photo transistor (GL3PR8) [LED1]
57	VRD-HT2HY242J	AA		C	Resistor (1/2W 2.4KΩ ±5%) [R6,14]
58	VRD-HT2HY471J	AA		C	Resistor (1/2W 470Ω ±5%) [R3,4]
59	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%) [R9~12]
60	VRD-RC2EY392J	AA		C	Resistor (1/4W 3.9KΩ ±5%) [AR-405][R5]
61	VRNHT2HK1000F	AC		C	Resistor (1/2W 100Ω ±1%) [R7,8]
62	VRS-RE3DA1R0J	AB		C	Resistor (2W 1.0Ω ±5%) [R1,2]
63	VRS-RE3LA470J	AC		C	Resistor (3.0W 47Ω ±5%) [R13]
64	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R297]
65	VRS-TS2AD101J	AA		C	Resistor (1/10W 100Ω ±5%) [R247]
66	VRS-TS2AD102J	AA		C	Resistor (1/10W 1.0KΩ ±5%) [R216]
67	VRS-TS2AD103F	AA		C	Resistor (1/10W 10KΩ ±1%) [R295]
68	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R215,217,219,220,224,226~230,232,234,236,242,245,249]

## 40 PCU PWB(except for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
68	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R251~253,267,271,272,273,274,285,286,289,298]
69	VRS-TS2AD104J	AA		C	Resistor (1/10W 100KΩ ±5%) [R266]
70	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [R212~214,265,290]
71	VRS-TS2AD133F	AA		C	Resistor (1/10W 13KΩ ±1%) [R240]
72	VRS-TS2AD151J	AA		C	Resistor (1/10W 150KΩ ±5%) [R205]
73	VRS-TS2AD152F	AA		C	Resistor (1/10W 1.5KΩ ±1%) [R263,264,268]
74	VRS-TS2AD152J	AA		C	Resistor (1/10W 1.5KΩ ±5%) [R202,203]
75	VRS-TS2AD153F	AA		C	Resistor (1/10W 15KΩ ±1%) [R269]
76	VRS-TS2AD162J	AA		C	Resistor (1/10W 1.6KΩ ±5%) [AR-405][R218]
77	VRS-TS2AD203J	AA		C	Resistor (1/10W 20KΩ ±5%) [R262,270]
78	VRS-TS2AD222J	AA		C	Resistor (1/10W 2.2KΩ ±5%) [R287]
79	VRS-TS2AD242J	AA		C	Resistor (1/10W 2.4KΩ ±5%) [R204,210]
80	VRS-TS2AD304J	AA		C	Resistor (1/10W 300KΩ ±5%) [R258,284]
81	VRS-TS2AD330J	AA		C	Resistor (1/10W 33Ω ±5%) [R231]
82	VRS-TS2AD391J	AA		C	Resistor (1/10W 390Ω ±5%) [R233]
83	VRS-TS2AD392F	AA		C	Resistor (1/10W 3.9KΩ ±1%) [R254]
84	VRS-TS2AD471J	AA		C	Resistor (1/10W 470Ω ±5%) [R248,292]
85	VRS-TS2AD472F	AA		C	Resistor (1/10W 4.7KΩ ±1%) [R259,280,296]
86	VRS-TS2AD472J	AA		C	Resistor (1/10W 4.7KΩ ±5%) [R241,246,291,293,294]
87	VRS-TS2AD473F	AA		C	Resistor (1/10W 47KΩ ±1%) [R260,281]
88	VRS-TS2AD473J	AA		C	Resistor (1/10W 47KΩ ±5%) [R200,201,206~209,237~239,243,244,282,283,288]
89	VRS-TS2AD514J	AG		C	Resistor (1/10W 510KΩ ±5%) [R235]
90	VRS-TS2AD562J	AA		C	Resistor (1/10W 5.6KΩ ±5%) [R275,276]
91	VRS-TS2AD621J	AA		C	Resistor (1/10W 620Ω ±5%) [R250,261]
92	VRS-TS2AD681F	AA		C	Resistor (1/10W 680Ω ±1%) [R255]
93	VRS-TS2AD681J	AA		C	Resistor (1/10W 680Ω ±5%) [R256,279]
94	VRS-TS2AD822J	AA		C	Resistor (1/10W 8.2KΩ ±5%) [R257,278]
95	VRS-TS2AD911J	AA		C	Resistor (1/10W 910Ω ±5%) [R211,277]
96	VSDTA123YK/-1	AB		B	Transistor (DTA123YK) [Q200,201]
97	VSDTC114YK/-1	AC		B	Transistor (DTC114YK) [Q202]
98	VS2SB1132-R-1	AE		B	Transistor (2SB1132R) [AR-405][Q203,204]
99	VS2SC2412K/-1	AB		B	Transistor (2SC2412K) [Q205]
100	VS2SC945///-1	AD		B	Transistor (2SC945) [Q1,2]
	(Unit)				
901	CPWBN1267FC53	CB		E	PCU PWB without FLASH PWB) [except AR-505]

## 41 PCU PWB(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	VHi28F081-11F	BF	N	B	PCU FLASH PWB (28F081-06F) [for SOCKET1]
2	QCNCM0923FC16	AF		C	Connector (B16B-PHDSSB) [CN2]
3	QCNCM0923FC3D	AF		C	Connector (B34B-PHDSS) [CN4]
4	QCNCM1044FCZZ	AL	N	C	Connector (53314-4015) [CN1,3]
5	QCNCM1045FCZZ	AN	N	C	Connector (53314-6015) [CN5,6]
6	QCNCW0382FCZZ	AE		C	Connector (34pin) [CN7]
7	QCNCW0885FCZZ	AG		C	Connector (1-171825-2) [CN12]
8	QSOC0073FCZZ	AL		C	Socket (MM20-72B1-1) [SOCKET1]
9	RCRS-0010FCZZ	AK		B	Crystal (9.83MHz) [X1]
10	RMPTW4103QCJJ	AB		B	Block resistor (10KΩ×4 1/32W ±5%) [BR1~7,9-20,23,26~39,41~43]
11	RMPTW4122QCJJ	AB		B	Block resistor (1.2KΩ×4 1/32W ±5%) [BR40]
12	RMPTW4222QCJJ	AB		B	Block resistor (2.2KΩ×4 1/32W ±5%) [BR45]
13	RMPTW4472QCJJ	AB		B	Block resistor (4.7KΩ×4 1/32W ±5%) [B24,25,44]
14	VCCCTV1HH220J	AA		C	Capacitor (50WV 22PF) [C320,328]
15	VCEAGU1AW476M	AA		C	Capacitor (10WV 47μF) [C15,24]
16	VCEAGA1AW477M	AB		C	Capacitor (10WV 470μF) [C3]
17	VCEAGA1CW477M	AB		C	Capacitor (16WV 470μF) [C1]
18	VCEAGU1HW105M	AA		C	Capacitor [C22]
19	VCEAGA1HW224M	AA		C	Capacitor (50WV 0.22μF) [C7,8]
20	VCEAGU1HW335M	AA		C	Capacitor (50WV 3.3μF) [C6]
21	VCEAGA1VW106M	AA		C	Capacitor (35WV 10μF) [C5,4,23]
22	VCEAGU1VW476M	AB		C	Capacitor (35WV 47μF) [C10]
23	VCEAZA1AW226M	AB		C	Capacitor (10WV 22μF) [C9]
24	VCEAZU1VW477M	AD		C	Capacitor (35WV 470μF) [C2,21]
25	VCKYTV1HB101K	AA		C	Capacitor (50WV 100pF) [C342,350]
	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C200~207,211,230~293,237,242,247,251~253,263,272,281]
26	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C290~293,298,302,303,310,314,319,321]
	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C324~330,332,333,336~341,343,344,349,352]
27	VCKYTV1HB222K	AA		C	Capacitor (50WV 2200pF) [C254,295]
28	VCKYTV1HB471K	AA		C	Capacitor (50WV 470pF) [C244,296]
29	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C212~229,234,236,243~246,248~250,255~262,264,271]

## 41 PCU PWB(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
29	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C273~280,282~289,297,299~301,306,308,309]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C311~315,317,318,322,323~335]
30	VCQYNU1HM103K	AA		C	Capacitor (50WV 0.010μF) [C14]
31	VHDDAN202K/-1	AB		B	Diode (DAN202K) [D203,206,208,210~215]
32	VHDDAP202K/-1	AB		B	Diode (DAP202K) [D203~206,215]
33	VHDDSM1D1/-1	AB		B	Diode (DSM1D1) [D1,2]
34	VHDMA704A/-1	AC		B	Diode (MA704A) [D216,200]
35	VHEHZS5B3/-V	AB		B	Zener diode (HZS5B3) [ZD6]
36	VHEHZS5CLL/-1	AC		B	Zener diode (HZS5CLL) [ZD4,5]
37	VHERD22FB/-1	AD		B	Zener diode (RD22FB) [ZD1~3]
38	VHiHD6413003T	BA		B	IC (HD3413003T) [IC35]
39	VHiHG71C254-1	AZ		B	IC (HG71C254) [IC36]
40	VHiH256-20-8A	AY		B	IC (IDT71256SA20Y) [IC26,28,30,34]
41	VHiLM324NS/-S	AC		B	IC (LM324NS) [IC18,45]
42	VHiLM339NS/-1	AD		B	IC (LM339NS) [IC10,20]
43	VHiM66500FP-1	AT		B	IC (M66500FP) [IC31]
44	VHiSLA7024MT/-	AS		B	IC (SLA7024MT) [IC25]
45	VHiSN74HC138S	AE		B	IC (SN74HC138S) [IC19]
46	VHiSN74HC151S	AG		B	IC (SN74HC151S) [IC13~16,21~24]
47	VHiSTA401A/-1	AP		B	IC (STA401A) [IC29]
48	VHiSTK67260-1	AZ	N	B	IC (STK67260-1) [IC38]
49	VHiTA7291S/-1	AF		B	IC (TA7291S) [IC4,5,39]
50	VHiTD62003AP1	AG		B	IC (TD62003AP1) [IC1~3,6,7,9,11,17,43,46]
51	VHiTD62504F-1	AF		B	IC (TD62504F) [IC27,32,33,37,44]
52	VHiTE7752/-1	AX		B	IC (TE7752) [IC12]
53	VHi74AHCT04NS	AD	N	B	IC (74AHCT04NS) [IC40,41]
54	VHi74LV32NS-1	AE		B	IC (74LV32NS) [IC42]
55	VHPGL3PR8/-1	AA		B	Photo transistor (GL3PR8) [LED1]
56	VRD-HT2HY242J	AA		C	Resistor (1/2W 2.4KΩ ±5%) [R9,14]
57	VRD-HT2HY471J	AA		C	Resistor (1/2W 470Ω ±5%) [R1,2]
58	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%) [R3~5,11,12]
59	VRNHT2HK1000F	AC		C	Resistor (1/2W 100Ω ±1%) [R8,10]
60	VRS-RE3DA1R0J	AB		C	Resistor (2W 1.0Ω ±5%) [R6,7]
61	VRS-RE3LA470J	AC		C	Resistor (3.0W 47Ω ±5%) [R13]
62	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R280]
63	VRS-TS2AD101F	AB		C	Resistor (1/10W 100Ω ±1%) [R282]
64	VRS-TS2AD101J	AA		C	Resistor (1/10W 100Ω ±5%) [R263]
65	VRS-TS2AD102J	AA		C	Resistor (1/10W 1.0KΩ ±5%) [R210]
66	VRS-TS2AD103F	AA		C	Resistor (1/10W 10KΩ ±1%) [R207]
67	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R206,209,215,219,222~225,228,230~234,236,239]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R244,259,261,269,270,275,276,279,285,290]
68	VRS-TS2AD104J	AA		C	Resistor (1/10W 100KΩ ±5%) [R277]
69	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [R240~248,274,299]
70	VRS-TS2AD133F	AA		C	Resistor (1/10W 13KΩ ±1%) [R262]
71	VRS-TS2AD151J	AA		C	Resistor (1/10W 150Ω ±5%) [R252]
72	VRS-TS2AD152F	AA		C	Resistor (1/10W 1.5KΩ ±1%) [R258,260,273]
73	VRS-TS2AD152J	AA		C	Resistor (1/10W 1.5KΩ ±5%) [R202,205]
74	VRS-TS2AD153F	AA		C	Resistor (1/10W 15KΩ ±1%) [R272]
75	VRS-TS2AD203J	AA		C	Resistor (1/10W 20KΩ ±5%) [R295,271]
76	VRS-TS2AD222J	AA		C	Resistor (1/10W 2.2KΩ ±5%) [R300]
77	VRS-TS2AD242J	AA		C	Resistor (1/10W 2.4KΩ ±5%) [R221,249]
78	VRS-TS2AD301F	AA		C	Resistor (1/10W 300Ω ±1%) [R281]
80	VRS-TS2AD304J	AA		C	Resistor (1/10W 300KΩ ±5%) [R267,297]
81	VRS-TS2AD330J	AA		C	Resistor (1/10W 33Ω ±5%) [R227]
82	VRS-TS2AD391J	AA		C	Resistor (1/10W 390Ω ±5%) [R221]
83	VRS-TS2AD392F	AA		C	Resistor (1/10W 3.9KΩ ±1%) [R266]
84	VRS-TS2AD471J	AA		C	Resistor (1/10W 470Ω ±5%) [R294,278]
85	VRS-TS2AD472F	AA		C	Resistor (1/10W 4.7KΩ ±1%) [R208,265,298]
86	VRS-TS2AD472J	AA		C	Resistor (1/10W 4.7KΩ ±5%) [R241,243,283,284,291]
87	VRS-TS2AD473F	AA		C	Resistor (1/10W 47KΩ ±1%) [R242,289]
88	VRS-TS2AD473J	AA		C	Resistor (1/10W 47KΩ ±5%) [R200,201,203,204,216~218,237,238,245,292,293,301]
89	VRS-TS2AD514J	AG		C	Resistor (1/10W 510KΩ ±5%) [R229]
90	VRS-TS2AD562J	AA		C	Resistor (1/10W 5.6KΩ ±5%) [R286,288]
91	VRS-TS2AD621J	AA		C	Resistor (1/10W 620Ω ±5%) [R257,226]
92	VRS-TS2AD681F	AA		C	Resistor (1/10W 680Ω ±1%) [R268]
93	VRS-TS2AD681J	AA		C	Resistor (1/10W 680Ω ±5%) [R241,295]
94	VRS-TS2AD822J	AA		C	Resistor (1/10W 8.2KΩ ±5%) [R204,296]
95	VRS-TS2AD911J	AA		C	Resistor (1/10W 910Ω ±5%) [R251,287]
96	VSDTA123YK/-1	AB		B	Transistor (DTA123YK) [Q200,201]
97	VSDTC114YK/-1	AC		B	Transistor (DTC114YK) [Q202]
99	VS2SC2412K/-1	AB		B	Transistor (2SC2412K) [Q203]
100	VS2SC945/-1	AD		B	Transistor (2SC945) [Q1,2]
(Unit)					
901	CPWBN1415FC51		N	E	PCU PWB (without FLASH PWB)



## 42 ICU PWB(AR-280,285,335)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LX-NZ0032FCZZ	AA		C	Nut (P3035B)
2	PCOVW0829FCZZ	AC		C	Battery cover
3	PSPAZ1413FCZZ	AC		C	Spacer (PSM2-01)
4	QCNCM0972FCZZ	AH		C	Connector (26pin) [CN2]
5	QCNCM0974FCZZ	AK		C	Connector (RKH401TD019) [CN6]
6	QCNCM0990FCZZ	AE		C	Connector (10pin) [CN5]
7	QCNCM0991FCZZ	AG		C	Connector (30pin) [CN3]
8	QCNCM0998FCZZ	AF		C	Connector (22pin) [CN1]
9	QCNCM1015FCZZ	AG		C	Connector (28pin) [CN7]
10	QCNCW1020FCZZ	AF		C	Connector (22pin) [CN10]
11	QCNCW7036XC5J	AP		C	Connector (50pin) [CN11,12]
12	QSOCZ0070FCZZ	AN		C	Push memory Socket (9364-51872) [SOCKET 1,2]
13	QSOCZ0072FCZZ	AL		C	IC socket (917970-1) [CN8,9]
14	QSOCZ6428ACZZ	AE		C	IC socket (28P) (for IC22)
15	RC-KZ1054CCN2	AB		C	Capacitor (50WV 0.1μF) [C10,15,16,19,21,22,26,27,37,38]
16	RCiLF0080FCZZ	AC		C	Coil (BLM21B601SP) [L101]
17	RCRS-0012FCZZ	AU		B	Crystal (DOC49S2 50MHz) [X5]
18	RCRS-0028FCZZ	AQ		B	Crystal (DOC49S2 29MHz) [X4]
19	RCRS-0038FCZZ	AQ		B	Crystal (D0C49S2 39.035MHz) [X3]
20	RCRS-0040FCZZ	AS		C	Crystal (DSO751SB 78.070MHz) [X6]
21	RCRSP6676RCZZ	AG		C	Crystal (DT38 32.768KHZ) [X8]
22	RCRSQ6011SCZZ	AS		B	Crystal (32MHz) [X1]
23	RCRSZ1062ACZZ	AS		B	Crystal (40MHz) [X7]
24	RFiLZ0028FCZZ	AD		B	EMI filter (NFM40)(100PF) [NF1~7,9~28]
25	RFiLZ0032FCZZ	AD		B	EMI filter (NFM40220)(22PF) [NF29~64]
26	RMPTM0034FCZZ	AC		B	Block resistor (MNR35)(10KΩ×8) [BR1~19]
27	UBATL2033SCZZ	AK		A	Battery (CR2032-H03) [BT1]
28	VCCCTV1HH300J	AA		C	Capacitor (50WV 30PF) [C135,136]
29	VCCCTV1HH6R0D	AA		C	Capacitor (50WV 6.0PF) [C239,240]
30	VCEAPS0JC107M	AC		C	Capacitor (6.3WV 100μF) [C9]
31	VCEAPS0JC226M	AC		C	Capacitor (6.3WV 22μF) [C7,12]
32	VCEAPS1HC105M	AC		C	Capacitor (50WV 1.0μF) [C31]
33	VCEAPS1HC335M	AC		C	Capacitor (50WV 3.3μF) [C29,32]
34	VCEAPZ0JW108M	AE		C	Capacitor (6.3WV 1000μF) [C6]
35	VCEAPZ0JW337M	AD		C	Capacitor (6.3WV 330μF) [C8,28,30]
36	VCEAPZ0JW477M	AE		C	Capacitor (6.3WV 470μF) [C39,40]
37	VCEAPZ1CW477M	AE		C	Capacitor (16WV 470μF) [C33]
38	VCEAPZ1VW227M	AF		C	Capacitor (35WV 220μF) [C4,5]
39	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000PF) [C126,190,191,213]
40	VCKYTV1HF104Z	AA		C	Capacitor (50WV 0.10μF) [C101,103,106,144,147,148,156,160,163,164,179,180]
	VCKYTV1HF104Z	AA		C	Capacitor (50WV 0.10μF) [C193,194,214,238,242,243,244]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C102,104,105,107~119,124,125,127~134]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C139~141,145,146,150~155,157~159,161,162,165~169]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C172~178,181~189,192,195~212]
41	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C215~229,231~237,241,245]
42	VHDDAN217/-1	AC		B	Diode (DAN217) [D102]
43	VHDDAP202K/-1	AB		B	Diode (DAP202K) [D101]
44	VHDDSS133HV-1	AA		B	Diode (DSS133HV) [D1,2,3,4]
45	VHDRB411D/-1	AD		B	Diode (RB411D) [D103~106]
46	VHEHVS6A1/-1	AC		B	Zener diode (HZS6A1) [ZD1]
47	VHiAD9561JR-1	BG		B	IC (AD9561JR) [IC11]
48	VHiAT28C64B-1	AZ		B	IC (AT28C64B-1) [IC22]
49	VHiDS90C031-1	AW		B	IC (DS90C031) [IC6]
50	VHiD65803GL-1	BF		B	IC (D65803GL) [IC19]
51	VHiD65806GL-1	BK		B	IC (D65806GL) [IC33]
52	VHiD65808GL-1	BM		B	IC (D65808GL) [IC20]
53	VHiD82113GN-1	BX		B	IC (D82113GN) [IC14]
54	VHiD82114GN-1	BX		B	IC (D82114GN) [IC23]
55	VHiD82165GC-1	BE		B	IC (D82165GC) [IC7]
56	VHiD9001MF-H/	BK		B	IC (D9001MF-H) [IC32]
57	VHiIS61C25612	AN		B	IC (IS61C25612) [IC1,2,3,17,18]
58	VHiIS61C51215	AU		B	IC (IS61C51215) [IC27,28,29,30]
59	VHiLH537C0G-1	BC		B	IC (LH537C0G) [IC26]
60	VHiLM339NS/-1	AD		B	IC (LM339NS) [IC110]
61	VHiLZ9AT36/-1	BB		B	IC (LZ9AT36) [IC34]
62	VHiMB86604L-1	BC		B	IC (MB86604L) [IC37,39]
63	VHiMCF5202P25	BG		B	IC (MCF5202P25) [IC21]
64	VHiM66235FP-1	AT		B	IC (M66235FP) [IC16]
65	VHiNJU6356E-1	AK		B	IC (NJU6356E) [IC40]
66	VHiSN74ALS574	AL		B	IC (SN74ALS574) [IC5]
67	VHiSN74ALS74N	AF		B	IC (SN74ALS74N) [IC101]
68	VHiSN74AS74NS	AH		B	IC (SN74AS74NS) [IC104]
69	VHiTC74ACT32F	AF		B	IC (TC74ACT32F) [IC12]
70	VHiTC74AC04FN	AD		B	IC (TC74AC04FN) [IC103,111]
71	VHiTC74AC08FN	AE		B	IC (TC74AC08F) [IC105,115]
72	VHiTC74AC32FN	AD		B	IC (TC74AC32FN) [IC9,35]
73	VHiTD62503F/-	AG		B	IC (TD62503F) [IC10]
74	VHi1816-6/-1	AZ		B	IC (1816-6) [IC24,25]
75	VHi74AS00//NS	AF		B	IC (74AS00) [IC36]
76	VHi74AS157NS1	AL		B	IC (74AS157NS1) [IC41]

## 42 ICU PWB(AR-280,285,335)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
77	VH i 7 4 A S 1 5 8 / N S	AN		B	IC (74AS158) [IC31]
78	VH i 7 4 V H C T 0 8 F 1	AF		B	IC (74VHCT08F1) [IC4]
79	VH i 7 4 V H C T 2 4 0 F	AH		B	IC (74VHCT240F) [IC102,106,108,109,114,118]
80	VH i 7 4 V H C T 2 4 4 F	AH		B	IC (74VHCT244F) [IC107,116,117]
81	VH i 7 4 V H C T 2 4 5 F	AK		B	IC (74VHCT254F) [IC112,113]
82	VHPGL3PR8/-1	AA		B	Photo transistor (GL3PR8) [LD1]
83	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R102~110,112~119,123,125,130,132]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R146~167,182~196,198~201,205,235,236]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R241~246,251,253~255,257,258,266,267]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R276~295,374~385,387~396]
84	VRS-TS2AD101J	AA		C	Resistor (1/10W 100Ω ±5%) [R204]
85	VRS-TS2AD102J	AA		C	Resistor (1/10W 1.0KΩ ±5%) [R228,239,402]
86	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R131,139,141,142,145,168~172,207,213,214,216,219,230,233]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R234,240,248,259~261,264,268~270,273,314,315,340,341,401]
87	VRS-TS2AD105J	AA		C	Resistor (1/10W 1MΩ ±5%) [R120]
88	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [R111,218]
89	VRS-TS2AD151J	AA		C	Resistor (1/10W 150Ω ±5%) [R224]
90	VRS-TS2AD200J	AA		C	Resistor (1/10W 20Ω ±5%) [R124]
91	VRS-TS2AD221J	AA		C	Resistor (1/10W 220Ω ±5%) [R121]
92	VRS-TS2AD222J	AA		C	Resistor (1/10W 2.2KΩ ±5%) [R206,217]
93	VRS-TS2AD223J	AA		C	Resistor (1/10W 22KΩ ±5%) [R215,397~400]
94	VRS-TS2AD224J	AA		C	Resistor (1/10W 220KΩ ±5%) [R221]
95	VRS-TS2AD301J	AA		C	Resistor (1/10W 300Ω ±5%) [R208,227]
96	VRS-TS2AD363J	AA		C	Resistor (1/10W 36KΩ ±5%) [R225]
97	VRS-TS2AD391J	AA		C	Resistor (1/10W 390Ω ±5%) [R247]
98	VRS-TS2AD393J	AA		C	Resistor (1/10W 39KΩ ±5%) [R220]
99	VRS-TS2AD472J	AA		C	Resistor (1/10W 4.7KΩ ±5%) [R263,272]
100	VRS-TS2AD562J	AA		C	Resistor (1/10W 5.6KΩ ±5%) [R126,127,129,140,143,144,197,238,274,275,372,373,386]
101	VRS-TS2AD683J	AA		C	Resistor (1/10W 68KΩ ±5%) [R223]
102	VRS-TS2AD820J	AA		C	Resistor (1/10W 82Ω ±5%) [R173~181]
103	VRS-TS2AD911J	AA		C	Resistor (1/10W 910Ω ±5%) [R222]
104	VRS-TS2AD913J	AA		C	Resistor (1/10W 91KΩ ±5%) [R226]
105	VRS-TW2ED221J	AA		C	Resistor (1/4W 220Ω ±5%) [R302~307,316~321,328~333]
	VRS-TW2ED221J	AA		C	Resistor (1/4W 220Ω ±5%) [R342~347,354~359,366~371]
106	VRS-TW2ED331J	AA		C	Resistor (1/4W 330Ω ±5%) [R296~301,308~313,322~327]
	VRS-TW2ED331J	AA		C	Resistor (1/4W 330Ω ±5%) [R334~339,348~353,360~365]
107	VRSTS2AD4020F	AA		C	Resistor (1/10W 402Ω ±1%) [R128]
108	VSDTA114YK/-1	AC		B	Transistor (DTA114YK) [Q101]
109	VSDTC114EK/-1	AB		B	Transistor (DTC114EK) [Q106]
110	VSDTC114YK/-1	AC		B	Transistor (DTC114YK) [Q102,103,105,107]
111	VSDTC124XK/-1	AB		B	Transistor (DTC124XK) [Q104]
200	VH i 2 8 F 0 8 2 - 0 1 F	BN		E	ICU FLASH PWB [SOCKET1]
	(Unit)				
901	CPWBN1326FC52	DD		E	ICU PWB [AR-280,285]
	CPWBN1325FC54	DG		E	ICU PWB [AR-335]

## 43 ICU PWB(AR-250,281,286,336,405)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	G L E G G 0 0 6 3 F C Z Z	AE		C	Rubber foot (AR-505,Australia,Europe,Russia,Taiwan,South Africa)
2	L X - N Z 0 0 3 2 F C Z Z	AA		C	Nut (P3035B)
3	P C O V W 0 8 2 9 F C Z Z	AC		C	Battery cover
4	P S H E P 0 2 9 3 G C Z Z	AB		C	PS front sheet (except AR-250)
5	P S P A Z 1 4 1 3 F C Z Z	AC		C	Spacer (PSM2-01)
6	Q C N C M 0 9 7 2 F C Z Z	AH		C	Connector (26pin) [CN2]
7	Q C N C M 0 9 7 4 F C Z Z	AK		C	Connector (RKH401TD019) [CN6]
8	Q C N C M 0 9 9 0 F C Z Z	AE		C	Connector (10pin) [CN5]
9	Q C N C M 0 9 9 1 F C Z Z	AG		C	Connector (30pin) [CN3]
10	Q C N C M 0 9 9 8 F C Z Z	AF		C	Connector (22pin) [CN1]
11	Q C N C M 1 0 1 5 F C Z Z	AG		C	Connector (28pin) [CN7]
12	Q C N C W 1 0 2 0 F C Z Z	AF		C	Connector (22pin) [CN10]
13	Q C N C W 7 0 3 6 X C 5 J	AP		C	Connector (50pin) [CN11,12]
14	Q S O C Z 0 0 7 0 F C Z Z	AN		C	Push memory socket (93764-51872) [SOCKET1,2]
15	Q S O C Z 0 0 7 2 F C Z Z	AL		C	SIMM socket (917970-1) (except AR-250)[CN8]
	Q S O C Z 0 0 7 2 F C Z Z	AL		C	SIMM socket (917970-1) (AR-250)[CN8,9]
16	Q S O C Z 6 4 2 8 A C Z Z	AE		C	IC socket (28P) [for IC22]
17	R C - K Z 1 0 5 4 C C N 2	AB		C	Capacitor (50WV 0.1μF) [C13,15,19,21,22,26,27,34,36]
18	R C i L F 0 0 8 0 F C Z Z	AC		C	Coil (BLM21B601SP) [L101]
19	R C R S - 0 0 4 9 F C Z Z	AP		B	Crystal (29MHz) [AR-250,281,286,336][X4]
	R C R S - 0 0 5 0 F C Z Z	AP		B	Crystal (8002JC 34.2MHz) [AR-405][X4]
20	R C R S - 0 0 5 1 F C Z Z	AP		B	Crystal (32MHz) [AR-250,281,286,336][X1]
	R C R S - 0 0 5 2 F C Z Z	AP		B	Crystal (8002JC 37.9MHz) [AR-405][X1]
21	R C R S - 0 0 5 3 F C Z Z	AP		B	Crystal (39.167MHz) [AR-250,281,286,336][X2]

## 43 ICU PWB(AR-250,281,286,336,405)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
21	R C R S - 0 0 5 4 F C Z Z	AP		B	Crystal (8002JC 47.231MHz) [AR-405][X2]
22	R C R S - 0 0 5 5 F C Z Z	AP		B	Crystal (8002JC 40MHz) [X6]
23	R C R S - 0 0 5 6 F C Z Z	AP		B	Crystal (8002JC 50MHZ) [X5]
24	R C R S P 6 6 7 6 R C Z Z	AG		B	Crystal (DT38 32.768KHZ) [X7]
25	R F i L N 6 0 1 2 R C Z Z	AB		B	EMI filter [NF76~81]
26	R F i L N 6 0 1 3 R C Z Z	AB		B	EMI filter [NF65~75,82~84]
27	R F i L Z 1 0 2 9 L C Z Z	AE		B	EMI filter (EXCCET101U)(AR-405,Australia,Europe,Russia,Taiwan,South Africa) [NF1~7,9~28]
	R F i L Z 0 0 2 8 F C Z Z	AD		B	EMI filter (NFM40)(AR-250,281,286,336 and AR-405,Other countries) [NF1~7,9~28]
28	R F i L Z 1 0 3 2 L C Z Z	AE		B	EMI filter (EXCCET220U)(AR-405,Australia,Europe,Russia,Taiwan,South Africa) [NF29~64]
	R F i L Z 0 0 3 2 F C Z Z	AD		B	EMI filter (NFM40220)(AR-250,281,286,336 and AR-405,Other countries) [NF29~64]
29	R M P T M 0 0 3 4 F C Z Z	AC		B	Block resistor (10KΩ×8) (except AR-250)[BR1~19]
	R M P T M 0 0 3 4 F C Z Z	AC		B	Block resistor (10KΩ×8) (AR-250)[BR1~23]
30	U B A T L 2 0 3 3 S C Z Z	AK		A	Battery (CR2032-H03) [BT1]
31	V C C C T V 1 H H 3 0 0 J	AA		C	Capacitor (50WV 30PF) [C141,142]
32	V C C C T V 1 H H 6 R 0 D	AA		C	Capacitor (50WV 6.0PF) [C235,236]
33	V C E A J U 0 J W 1 0 7 M	AB		C	Capacitor (6.3WV 100μF) [C9]
34	V C E A J U 0 J W 2 2 6 M	AB		C	Capacitor (6.3WV 22μF) [C7,12]
35	V C E A J U 0 J W 3 3 7 M	AC		C	Capacitor (6.3WV 330μF) [C8,28,30,39,40]
36	V C E A J U 1 H W 1 0 5 M	AB		C	Capacitor (50WV 1.0μF) [C31]
37	V C E A J U 1 H W 3 3 5 M	AB		C	Capacitor (50WV 3.3μF) [C29,32]
38	V C E A 2 U 0 J W 1 0 8 M	AD		C	Capacitor (6.3WV 1000μF) [C6]
39	V C E A 2 U 1 C W 4 7 7 M	AD		C	Capacitor (16WV 470μF) [C33]
40	V C E A 2 U 1 V W 2 2 7 M	AD		C	Capacitor (35WV 220μF) [C4,5]
41	V C K Y T V 1 H B 1 0 2 K	AA		C	Capacitor (50WV 1000PF) [C122,133,187,195,213]
42	V C K Y T V 1 H F 1 0 3 Z	AA		C	Capacitor (50WV 0.010μF) [C199]
43	V C K Y T V 1 H F 1 0 4 Z	AA		C	Capacitor (50WV 0.10μF) [C101,103,106,116,119,124,152,153,154,165,168]
	V C K Y T V 1 H F 1 0 4 Z	AA		C	Capacitor (50WV 0.10μF) [C171,180,189,200,201,223,234,238,239]
	V C K Y T V 1 H F 1 0 4 Z	AA		C	Capacitor (50WV 0.10μF) (AR-250 only)[C242,245,247]
	V C K Y T V 1 H F 2 2 3 Z	AA		C	Capacitor (50WV 0.022μF) [C102,104,105,107~115,117,118,120,121,123,125~132,134~140]
44	V C K Y T V 1 H F 2 2 3 Z	AA		C	Capacitor (50WV 0.022μF) [C144~151,156~164,166,167,169,170,172,173]
	V C K Y T V 1 H F 2 2 3 Z	AA		C	Capacitor (50WV 0.022μF) [C176~179,181~186,188,190~194,196,197,198]
	V C K Y T V 1 H F 2 2 3 Z	AA		C	Capacitor (50WV 0.022μF) [C202~212,214~222,224~233,237,240,241]
	V C K Y T V 1 H F 2 2 3 Z	AA		C	Capacitor (50WV 0.022μF) (AR-250 only)[C243,244,246,248~251]
	V C K Y T V 1 H F 2 2 3 Z	AA		C	Capacitor (50WV 0.022μF) (AR-250 only)[C243,244,246,248~251]
45	V H D D A N 2 1 7 / - 1	AC		B	Diode (DAN217) [D102]
46	V H D D A P 2 0 2 K / - 1	AB		B	Diode (DAP202K) [D101]
47	V H D D S S 1 3 3 H V - 1	AA		B	Diode (DSS133HV) [D1~5]
48	V H D R B 4 1 1 D / - 1	AD		B	Diode (RB411D) [D103,104,105,106]
49	V H E H Z S 5 A 1 / - 1	AC		B	Zener diode (HZS5A1) [ZD2]
50	V H E H Z S 6 A 1 / - 1	AC		B	Zener diode (HZS6A1) [ZD1]
51	V H i A T 2 8 C 6 4 B - 1	AZ		B	IC (AT28C74B-1) [IC22]
52	V H i D S 9 0 C 4 0 1 - 1	AU		B	IC (DS90C401) [IC7]
53	V H i D 6 5 8 0 3 G L - 1	BF		B	IC (D65803GL) [IC19]
54	V H i D 6 5 8 0 6 G L - 1	BK		B	IC (D65806GL) [IC31]
55	V H i D 6 5 8 0 8 G L - 1	BM		B	IC (D65808GL) [IC20]
56	V H i D 8 2 1 6 5 G C - 1	BE		B	IC (D82165GC) [IC15]
57	V H i D 8 2 3 5 5 G N - 1	BS		B	IC (D82355GN) [IC13]
58	V H i D 8 2 3 5 6 G N - 1	BS		B	IC (D82356GN) [IC23]
59	V H i i S 6 1 C 2 5 6 1 2	AN		B	IC (IS61C25612) (except AR-250)[IC1,2,3,18]
	V H i i S 6 1 C 2 5 6 1 2	AN		B	IC (IS61C25612) (AR-250)[IC1,2,3,18,37,38]
60	V H i i S 6 1 C 5 1 2 1 5	AU		B	IC (IS61C51215) [IC27,28,29,30]
61	V H i L H 5 3 7 C 0 G - 1	BC		B	IC (LH537C0G) [IC26]
62	V H i L M 3 3 9 N S / - 1	AD		B	IC (LM339NS) [IC111]
63	V H i L Z 9 A T 3 6 / - 1	BB		B	IC (LZ9AT36) [IC32]
64	V H i P M - 2 M C / - 1	BN		B	IC (PM-2MC) (AR-250 only)[IC36]
65	V H i M B 8 6 6 0 4 L - 1	BC		B	IC (MB86604L) [IC33,34]
66	V H i M C F 5 2 0 2 P 2 5	BG		B	IC (MCF5202P25) [IC21]
67	V H i M 6 6 2 3 5 F P - 1	AT		B	IC (M66235FP) [IC8]
68	V H i N J U 6 3 5 6 E - 1	AK		B	IC (NJU6356E) [IC35]
69	V H i S N 7 4 A L S 5 7 4	AL		B	IC (SN74ALS574) [IC6]
70	V H i S N 7 4 A S 7 4 N S	AH		B	IC (SN74AS74NS) [IC101,119]
71	V H i T C 7 4 A C T 0 8 F	AF		B	IC (TC74ACT08F) [IC14]
72	V H i T C 7 4 A C T 3 2 F	AF		B	IC (TC74ACT32F) [IC11]
73	V H i T C 7 4 A C 0 4 F N	AD		B	IC (TC74AC04FN) [IC105,112]
74	V H i T C 7 4 A C 0 8 F N	AE		B	IC (TC74AC08F) [IC106,116]
75	V H i T D 6 2 5 0 3 F / -	AG		B	IC (TD62503F) [IC9]
76	V H i X L i 2 0 5 0 X - 1	BQ		B	IC (XLI2050X) [IC16]
77	V H i 1 8 1 6 - 6 / - 1	AZ		B	IC (1816-6) [IC24,25]
78	V H i 7 4 A S 0 4 / - N S	AG		B	IC (74AS04) [IC102]
79	V H i 7 4 A S 1 5 7 N S 1	AL		B	IC (74AS157NS1) [IC5,104]
80	V H i 7 4 V H C T 0 8 F 1	AF		B	IC (74VHCT08F1) [IC4]
81	V H i 7 4 V H C T 2 4 0 F	AH		B	IC (74VHCT240F) [IC103,107,109,110,115]
82	V H i 7 4 V H C T 2 4 4 F	AH		B	IC (74VHCT244F) [IC108,117,118]
83	V H i 7 4 V H C T 2 4 5 F	AK		B	IC (74VHCT245F) [IC113,114]
84	V H P M V R 3 8 6 4 K - J	AC		B	LED (MVR3864K) [LD1]
85	V R S - T S 2 A D 0 0 0 J	AA		C	Resistor (1/10W 0Ω ±5%) [R101~109,112~118,122,126,130,131,136,141]

## 43 ICU PWB(AR-250,281,286,336,405)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
85	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R157,168,196,200,201,202,205,206,212,213]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R220~239,R322~341,343,344,349~351,353~355,358,359]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) (AR-250,281,386,336 only)[R197]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) (AR-250 only)[R199,364,366,369~376]
86	VRS-TS2AD101J	AA		C	Resistor (1/10W 100Ω ±5%) [R110,123,160]
87	VRS-TS2AD102J	AA		C	Resistor (1/10W 1.0KΩ ±5%) [R111,139,193]
88	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R120,137,142,143,145,146,161~165]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R171,176,177,179,182,191,194,195,207,208]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R209,214,215,216,241,242,243,245,246,247]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) (AR-250 only)[R363,365]
89	VRS-TS2AD105J	AA		C	Resistor (1/10W 1MΩ ±5%) [R134]
90	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [R127,183]
91	VRS-TS2AD151J	AA		C	Resistor (1/10W 150Ω ±5%) [R189]
92	VRS-TS2AD200J	AA		C	Resistor (1/10W 20Ω ±5%) [R119]
93	VRS-TS2AD221J	AA		C	Resistor (1/10W 220Ω ±5%) [R135]
94	VRS-TS2AD222J	AA		C	Resistor (1/10W 2.2KΩ ±5%) [R169,178]
95	VRS-TS2AD223J	AA		C	Resistor (1/10W 22KΩ ±5%) [R181,345,346,347,348]
96	VRS-TS2AD224J	AA		C	Resistor (1/10W 220KΩ ±5%) [R184]
97	VRS-TS2AD301J	AA		C	Resistor (1/10W 300Ω ±5%) [R170,190]
98	VRS-TS2AD363J	AA		C	Resistor (1/10W 36KΩ ±5%) [R185]
99	VRS-TS2AD331J	AA		C	Resistor (1/10W 330Ω ±5%) [R356]
100	VRS-TS2AD391J	AA		C	Resistor (1/10W 390Ω ±5%) [R203]
101	VRS-TS2AD393J	AA		C	Resistor (1/10W 39KΩ ±5%) [R180]
102	VRS-TS2AD472J	AA		C	Resistor (1/10W 4.7KΩ ±5%) [R240,244]
103	VRS-TS2AD562J	AA		C	Resistor (1/10W 5.6KΩ ±5%) [R128,129,133,144,147,148,156,192,218,219,320,321,342]
	VRS-TS2AD562J	AA		C	Resistor (1/10W 5.6KΩ ±5%) (AR-250 only)[R361,362,368]
104	VRS-TS2AD683J	AA		C	Resistor (1/10W 68KΩ ±5%) [R188]
105	VRS-TS2AD820J	AA		C	Resistor (1/10W 82Ω ±5%) [R149~155,166,167]
106	VRS-TS2AD911J	AA		C	Resistor (1/10W 910Ω ±5%) [R187,357]
107	VRS-TS2AD913J	AA		C	Resistor (1/10W 91KΩ ±5%) [R186]
108	VRS-TW2ED221J	AA		C	Resistor (1/4W 220Ω ±5%) [R254~259,266~271,278~283]
	VRS-TW2ED221J	AA		C	Resistor (1/4W 220Ω ±5%) [R290~295,302~307,314~319]
109	VRS-TW2ED331J	AA		C	Resistor (1/4W 330Ω ±5%) [R248~253,260~265,272~277]
	VRS-TW2ED331J	AA		C	Resistor (1/4W 330Ω ±5%) [R284~289,296~301,308~313]
110	VRSTS2AD2940F	AA		C	Resistor (1/10W 294Ω ±1%) (AR-405)[R132]
111	VRSTS2AD3570F	AA		C	Resistor (1/10W 357Ω ±1%) (except AR-405)[R132]
112	VSDTA114YK/-1	AC		B	Transistor (DTA114YK) [Q101]
	VSDTC114EK/-1	AB		B	Transistor (DTC114EK) [Q106]
113	VSDTC114YK/-1	AC		B	Transistor (DTC114YK) [Q102,103,105,107]
114	VSDTC124XK/-1	AB		B	Transistor (DTC124XK) [Q104]
200	VHi28F082-03F	BN		E	ICU FLASH PWB (28F082-03F) [for IC1,2]
	(Unit)				
901	CPWBN1406FC51	DD		E	ICU PWB (without FLASH PWB) [AR-250]
	CPWBN1404FC51	DB		E	ICU PWB (without FLASH PWB) [AR-281,286]
	CPWBN1392FC53	DC		E	ICU PWB (without FLASH PWB) [AR-336]
	CPWBN1393FC51	DC		E	ICU PWB (without FLASH PWB) (Australia,Europe,Russia,Taiwan,South Africa)[AR-405]
	CPWBN1392FC52	DC		E	ICU PWB (without FLASH PWB) (except Australia,Europe,Russia,Taiwan,South Africa)[AR-405]

## 44 ICU PWB(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LX-NZ0032FCZZ	AA		C	Nut (P3035B)
2	PCÖVW0829FCZZ	AC		C	Battery cover
3	PSPAZ1413FCZZ	AC		C	Spacer (PSM2-01)
4	QCNCM0972FCZZ	AH		C	Connector (26pin) [CN2]
5	QCNCM0974FCZZ	AK		C	Connector (RKH401TD019) [CN6]
6	QCNCM0990FCZZ	AE		C	Connector (10pin) [CN5]
7	QCNCM0991FCZZ	AG		C	Connector (30pin) [CN3]
8	QCNCM0998FCZZ	AF		C	Connector (22pin) [CN1]
9	QCNCM1015FCZZ	AG		C	Connector (28pin) [CN7]
10	QCNCW1020FCZZ	AF		C	Connector (22pin) [CN10]
11	QCNCW1046FCZZ	AK	N	C	Connector (DHB-RA50-R1)(SCSI) [CN11,12]
12	QSOCZ0073FCZZ	AL		C	Socket,for DIMM [SOCKET1,2]
13	QSOCZ6428ACZZ	AE		C	IC socket (28P) (for IC22)
14	RC-KZ1054CCN2	AB		C	Capacitor (RPE132-906)(0.1μF) [C19,21,22,26,27]
15	RCiLF0080FCZZ	AC		C	Coil (BLM21B601SP) [L101]
16	RCRS-0055FCZZ	AP		B	Crystal (8002JC 40MHz) [X1,6]
17	RCRS-0056FCZZ	AP		B	Crystal (8002JC 50MHZ) [X5]
18	RCRS-0059FCZZ	AP	N	B	Crystal (38.2MHz) [X4]
19	RCRS-0063FCZZ	AP	N	B	Crystal (54.913MHz) [X2]
20	RCRSP6676RCZZ	AG		B	Crystal (DT38 32.768KHZ) [X7]
21	RFiLN6012RCZZ	AB		B	EMI filter (EXCEMT102BT) [NF76~81]
22	RFiLN6013RCZZ	AB		B	EMI filter (EXCEMT222BT) [NF65~75,83,84]
23	RFiLZ0028FCZZ	AD		B	EMI filter (NFM40) [NF1~7,9~28,82]
24	RFiLZ0032FCZZ	AD		B	EMI filter (NFM40220) [NF29~63,74]

## 44 ICU PWB(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
25	RMPTC4220QCJJ	AC		B	Block resistor (22Ω×4) [BR20~39]
26	RMPTM0034FCZZ	AC		B	Block resistor (10KΩ×8) [BR1~15]
27	UBATL2033SCZZ	AK		A	Battery (CR2032-H03) [BT1]
28	VCCCTV1HH6R0D	AA		C	Capacitor (50WV 6.0pF) [C235,236]
29	VCEAJU0JW106M	AB		C	Capacitor (6.3WV 10μF) [C263]
30	VCEAJU0JW226M	AB		C	Capacitor (6.3WV 22μF) [C7]
31	VCEAJU0JW107M	AB		C	Capacitor (6.3WV 100μF) [C9]
32	VCEAJU0JW337M	AC		C	Capacitor (6.3WV 330μF) [C8,28,30,39,40]
33	VCEAJU1HW105M	AB		C	Capacitor (50WV 1.0μF) [C31]
34	VCEAJU1HW335M	AB		C	Capacitor (50WV 3.3μF) [C29,32]
35	VCEA2U0JW108M	AD		C	Capacitor (6.3WV 1000μF) [C6]
36	VCEA2U1CW477M	AD		C	Capacitor (16WV 470μF) [C33]
37	VCEA2U1VW227M	AD		C	Capacitor (35WV 220μF) [C415]
38	VCKYTV1HB102K	AA		C	Capacitor (50WV 1000pF) [C133,187,195,213]
39	VCKYTV1HF103Z	AA		C	Capacitor (50WV 0.010μF) [C199,242,262]
40	VCKYTV1HF104Z	AA		C	Capacitor (50WV 0.10μF) [C101,103,106,119,124,129,131,152~154,168,171]
	VCKYTV1HF104Z	AA		C	Capacitor (50WV 0.10μF) [C180,189,200,201,223,224,238,239,241,245~256,261]
41	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C102,104,105,107,109,111,115,118,120,123,125~128,130,132,139]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C140,144~146,148,151,156~164,167,169,170,172,173]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C176~179,181,184~186,191~194,196~198,202~212]
	VCKYTV1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C214~220,222,224~231,233,237,240]
42	VHDDAN217/-/-1	AC		B	Diode (DAN217) [D102]
43	VHDDAP202K/-1	AB		B	Diode (DAP202K) [D101]
44	VHDDSS133HV-1	AA		B	Diode (DSS133HV) [D1~5]
45	VHDRB411D/-/-1	AD		B	Diode (RB411D) [D103~106]
46	VHEHZZS5A1/-/-1	AC		B	Zener diode (HZS5A1) [ZD2]
47	VHEHZZS6A1/-/-1	AC		B	Zener diode (HZS6A1) [ZD1]
48	VHIDS90C401-1	AU		B	IC (DS90C401) [IC7]
49	VHID65806GL-1	BK		B	IC (D65806GL) [IC31]
50	VHID65808GL-1	BM		B	IC (D65808GL) [IC20]
51	VHID65948GL-1	BH		B	IC (D65948GL062) [IC19]
52	VHID82355GN-1	BS		B	IC (D82355GN) [IC13]
53	VHID82441GD-1	BG	N	B	IC (D82441GD001) [IC23]
54	VHIS61C25612	AN		B	IC (IS61C25612) [IC1~3,18]
55	VHIS61C51215	AU		B	IC (IS61C51215) [IC27~30]
56	VHIKZ4E038E-1	BF	N	B	IC (KZ4E038E11C) [IC15]
57	VHILH537C0G-1	BC		B	IC (LH537C0G) [IC26]
58	VHILM339NS/-1	AD		B	IC (LM339NS) [IC111]
59	VHILZ9AT36/-1	BB		B	IC (LZ9AT36) [IC32]
60	VHIMB86604L-1	BC		B	IC (MB86604L) [IC33,34]
61	VHIMCF5202P25	BG		B	IC (MCF5202P25) [IC21]
62	VHINJU6356E-1	AK		B	IC (NJU6356E) [IC35]
63	VHIPM2060i/-1	BP	N	B	IC (RET) [IC16]
64	VHISD6416-100	BG		B	IC (SDRAM) [IC120~125]
65	VHISN74ALS574	AL		B	IC (SN74ALS574) [IC6]
66	VHISN74AS74NS	AH		B	IC (SN74AS74NS) [IC101]
67	VHITC74ACT08F	AF		B	IC (TC74ACT08F) [IC119]
68	VHITC74ACT32F	AF		B	IC (TC74ACT32F) [IC11]
69	VHITC74AC04FN	AD		B	IC (TC74AC04FN) [IC105,112]
70	VHITC74AC08FN	AE		B	IC (TC74AC08F) [IC106,116]
71	VHITD62503F/-	AG		B	IC (TD62503F) [IC9]
72	VHI28C256E15P	BB		B	IC (AT28C256E15) [IC22]
73	VHI74AS04/-/NS	AG		B	IC (74AS04) [IC102]
74	VHI74VHCT08F1	AF		B	IC (74VHCT08F1) [IC1]
75	VHI74VHCT240F	AH		B	IC (74VHCT240F) [IC103,109,110,115]
76	VHI74VHCT244F	AH		B	IC (74VHCT244F) [IC117,118]
77	VHI74VHCT245F	AK		B	IC (74VHCT245F) [IC113,114]
78	VHPMVR3864K-J	AC		B	LED (MVR3864K) [LD1]
79	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R102~110,118,122,141,157,168,196~198,200~202,205,206]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R212,213,243,343,344,350,351,361~363,367,377~383]
	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R385,393,402,406,410,411,438,441,443,475]
80	VRS-TS2AD101J	AA		C	Resistor (1/10W 100Ω ±5%) [R160,472]
81	VRS-TS2AD102J	AA		C	Resistor (1/10W 1.0KΩ ±5%) [R111,193]
82	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R137,143,145,146,171,176,177,179,182,191,194,195]
	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R207~209,214~217,241~247,366,371,388,389,476~480]
83	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [R127,183,391]
84	VRS-TS2AD151J	AA		C	Resistor (1/10W 150Ω ±5%) [R189]
85	VRS-TS2AD153F	AA		C	Resistor (1/10W 15KΩ ±1%) [R374]
86	VRS-TS2AD203F	AA		C	Resistor (1/10W 20KΩ ±1%) [R368]
87	VRS-TS2AD220J	AA		C	Resistor (1/10W 22Ω ±5%) [R150,412~418]
88	VRS-TS2AD222J	AA		C	Resistor (1/10W 2.2KΩ ±5%) [R169,178]
89	VRS-TS2AD223J	AA		C	Resistor (1/10W 22KΩ ±5%) [R181,345~348]
90	VRS-TS2AD224J	AA		C	Resistor (1/10W 220KΩ ±5%) [R184]
91	VRS-TS2AD301J	AA		C	Resistor (1/10W 300Ω ±5%) [R170,190]
92	VRS-TS2AD330J	AA		C	Resistor (1/10W 33Ω ±5%) [R442,451]
93	VRS-TS2AD363J	AA		C	Resistor (1/10W 36KΩ ±5%) [R185]

## 44 ICU PWB(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
94	VRS-TS2AD391J	AA		C	Resistor (1/10W 390Ω ±5%) [R203]
95	VRS-TS2AD392F	AA		C	Resistor (1/10W 3.9KΩ ±1%) [R372]
96	VRS-TS2AD393J	AA		C	Resistor (1/10W 39KΩ ±5%) [R180]
97	VRS-TS2AD472F	AA		C	Resistor (1/10W 4.7KΩ ±1%) [R373]
98	VRS-TS2AD472J	AA		C	Resistor (1/10W 4.7KΩ ±5%) [R240,244,358,359,439,440,444~447,449,462~470]
99	VRS-TS2AD562J	AA		C	Resistor (1/10W 5.6KΩ ±5%) [R128,129,144,147,148,156,192,342]
100	VRS-TS2AD683J	AA		C	Resistor (1/10W 68KΩ ±5%) [R188]
101	VRS-TS2AD750F	AA		C	Resistor(1/10W 75Ω ±1%) [R369]
102	VRS-TS2AD820J	AA		C	Resistor (1/10W 82Ω ±5%) [R155,160,167]
103	VRS-TS2AD911J	AA		C	Resistor (1/10W 910Ω ±5%) [R187,384]
104	VRS-TS2AD913J	AA		C	Resistor (1/10W 91KΩ ±5%) [R186]
105	VRS-TW2ED221J	AA		C	Resistor (1/4W 220Ω ±5%) [R254~259,266~271,278~283,290~295,302~307,314~319]
106	VRS-TW2ED331J	AA		C	Resistor (1/4W 330Ω ±5%) [R248~253,260~265,272~277,284~289,296~301,308~313]
107	VSDTA114YK/-1	AC		B	Transistor (DTA114YK) [Q101,108]
108	VSDTC114EK/-1	AB		B	Transistor (DTC114EK) [Q106]
109	VSDTC114YK/-1	AC		B	Transistor (DTC114YK) [Q103,105,107,109]
110	VSDTC124XK/-1	AB		B	Transistor (DTC124XK) [Q104]
200	VHi28F162A04F	BS	N		ICU FLASH PWB (28F162A04F)
	(Unit)				
901	CPWBN1414FC51	DD	N	E	ICU PWB (without FLASH PWB)

## 45 Operation control PWB(for AR-280,285,335)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	VHi28F161-05F	BL		B	Operation FLASH PWB (28F161-05F) [for DIMM1]
2	QCNCM0979FCZZ	AF		C	Connector (13Pin) [CN2,3]
3	QCNCM0980FCZZ	AF		C	Connector (10Pin) [CN1]
4	QCNCM0981FCZZ	AF		C	Connector (11Pin) [CN5]
5	QCNCM0982FCZZ	AF		C	Connector (12Pin) [CN204]
6	QCNCM0983FCZZ	AF		C	Connector (11Pin) [CN4]
7	QCNCM0984FCZZ	AD		C	Connector (3Pin) [CN202]
8	QCNCM0985FCZZ	AE		C	Connector (4Pin) [CN203]
10	QCNCW7191RC1B	AG		C	Connector (12Pin) [CN201]
11	QSOZC0071FCZZ	AP		C	Socket (MM20-72B1-1) [DIMM1]
12	RRCMC1003YCZZ	AG		B	Crystal (EF0S1085E5 10.752MHZ) [X1]
13	RCSR-0045FCZZ	AE		B	Crystal (EFOS9834E5 9.8304MHZ) [X2]
14	RFiLF0031FCZZ	AD		B	Ferrite bead (ACA3216M4-120-T) [FB201,202]
15	RMPTW4103QCJJ	AB		B	Block resistor (10KΩ×4 1/32W ±5%) [BR3,4,12,13,206~220]
16	RMPTW4122QCJJ	AB		B	Block resistor (1.2KΩ×4 1/32W ±5%) [BR7,10,16]
17	RMPTW4222QCJJ	AB		B	Block resistor (2.2KΩ×4 1/32W ±5%) [BR9,203]
18	RMPTW4334QCJJ	AB		B	Block resistor (330KΩ×4 1/32W ±5%) [BR5,6,8,11,14,15]
19	RMPTW4470QCJJ	AB		B	Block resistor (47Ω×4 1/32W ±5%) [BR204,205]
20	RMPTW4683QCJJ	AB		B	Block resistor (68KΩ×4 1/32W ±5%) [BR1,2,201,202]
21	RVR-M141JQCZZ	AC		B	Variable resistor (EVM3YSX50B14)(10KΩ) [VR1]
22	VCCCY1H101J	AA		C	Capacitor (50WV 100PF) [C208,209,210,211,218,219,220,221,226,227]
24	VCEAPS1AC226M	AC		C	Capacitor (10WV 22μF) [C16,29]
25	VCEAPS1AC476M	AC		C	Capacitor (10WV 47μF) [C13]
26	VCEAPS1CC106M	AC		C	Capacitor (16WV 10μF) [C2]
27	VCEAPS1HC225M	AD		C	Capacitor (50WV 2.2μF) [C3]
28	VCEAPS1VC106M	AC		C	Capacitor (35WV 10μF) [C4,5]
29	VCEAPZ1AW477M	AE		C	Capacitor (10WV 470μF) [C19]
30	VCEAPZ1CW477M	AE		C	Capacitor (16WV 470μF) [C14]
31	VCEAPZ1HW107M	AF		C	Capacitor (50WV 100μF) [C7]
32	VCEAPZ1VW107M	AE		C	Capacitor (35WV 100μF) [C6]
33	VCEAPZ1VW476M	AE		C	Capacitor (35WV 47μF) [C1]
34	VCFYEC1HM103J	AD		C	Capacitor (50WV 0.010μF) [C223]
35	VCKYCY1CB473K	AB		C	Capacitor (16WV 0.047μF) [C25]
36	VCKYCY1HB102K	AA		C	Capacitor (50WV 1000PF) [C10,11,12]
37	VCKYCY1HB103K	AA		C	Capacitor (50WV 0.010μF) [C232,233]
38	VCKYCY1HB222K	AA		C	Capacitor (50WV 2200PF) [C217,222,225,235]
39	VCKYCY1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C8,9,15,17,18,20~23,24,26,27,28,30,31,32]
	VCKYCY1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C201,202,203,204,205,206,207,212~216,224,228~231]
40	VHDDAN202K/-1	AB		B	Diode (DAN202K) [D3,4,6,14,15,18,19]
41	VHDDAP202K/-1	AB		B	Diode (DAP202K) [D1,2,13,16,17,205]
43	VHDRLS73///-1	AA		B	Diode (RLS73) [D12,201,202,203,204]
44	VHEHZU5.1B1-1	AC		B	Zener diode (HZU5.1B1) [D5]
46	VHiHD6413003T	BA		B	IC (HD6413003T) [IC14]
47	VHiH256-20-8A	AY		B	IC (IS61C256AH-15J) [IC3,5,16,17]
48	VHiLM317MDT-1	AK		B	IC (LM317MDT) [IC1]
49	VHiLM339NS/-1	AD		B	IC (LM339NS) [IC10]
50	VHiLM358PS/-S	AC		B	IC (LM358PS) [IC12]
53	VHiM54587FP-1	AK		B	IC (M54587FP) [IC13]
54	VHiNJM78L05UA	AE		B	IC (NJM78L05UA) [IC201]
55	VHiSLA907FF2L	AT		B	IC (SC908SF2V1) [IC6]

## 45 Operation control PWB(for AR-280,285,335)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
56	VH i SN74HCT244	AF		B	IC (SN74HCT244) [IC8]
59	VH i 74F32SJ/-1	AE		B	IC (74F32SJ) [IC4]
61	VH i 74LV08NS-1	AE		B	IC (74LV08NS) [IC9]
62	VH i 74LV32NS-1	AE		B	IC (74LV32NS) [IC2]
63	VH i 74LV04NS-1	AE		B	IC (74LV04NS) [IC15,18]
64	VH i 74LV14NS-1	AF		B	IC (74LV14NS) [IC7]
65	VH i 74VHCT04-1	AF		B	IC (74VHCT04) [IC11]
66	VHPLT1D67A/-1	AC		B	LED (LT1D67A) [D9]
68	VRS-TP2BD271J	AA		C	Resistor (1/8W 270Ω ±5%) [R15]
70	VRS-TS2AD103F	AA		C	Resistor (1/10W 10KΩ ±1%) [R224,226]
71	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R6,207,211,214,215,219,228-233]
72	VRS-TS2AD105J	AA		C	Resistor (1/10W 1MΩ ±5%) [R9]
73	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [R212]
74	VRS-TS2AD123F	AA		C	Resistor (1/10W 12KΩ ±1%) [R235]
75	VRS-TS2AD151J	AA		C	Resistor (1/10W 150Ω ±5%) [R218]
76	VRS-TS2AD154F	AA		C	Resistor (1/10W 150KΩ ±1%) [R7]
77	VRS-TS2AD183F	AA		C	Resistor (1/10W 18KΩ ±1%) [R12,225]
78	VRS-TS2AD183J	AA		C	Resistor (1/10W 18KΩ ±5%) [R220]
79	VRS-TS2AD202J	AA		C	Resistor (1/10W 2KΩ ±5%) [R223]
80	VRS-TS2AD203J	AA		C	Resistor (1/10W 20KΩ ±5%) [R4,17,19,21,23]
81	VRS-TS2AD222J	AA		C	Resistor (1/10W 2.2KΩ ±5%) [R213]
82	VRS-TS2AD272J	AA		C	Resistor (1/10W 2.7KΩ ±5%) [R16,18,20]
83	VRS-TS2AD301F	AA		C	Resistor (1/10W 300Ω ±1%) [R11]
84	VRS-TS2AD303J	AA		C	Resistor (1/10W 30KΩ ±5%) [R22,203]
85	VRS-TS2AD304F	AA		C	Resistor (1/10W 300KΩ ±1%) [R2]
86	VRS-TS2AD333J	AA		C	Resistor (1/10W 33KΩ ±5%) [R221]
87	VRS-TS2AD334J	AA		C	Resistor (1/10W 330KΩ ±5%) [R201,204,205]
88	VRS-TS2AD363F	AA		C	Resistor (1/10W 36KΩ ±1%) [R10]
89	VRS-TS2AD473J	AA		C	Resistor (1/10W 47KΩ ±5%) [R3,5,202,208,209,210]
90	VRS-TS2AD564F	AC		C	Resistor (1/10W 560KΩ ±1%) [R1]
91	VRS-TS2AD622F	AA		C	Resistor (1/10W 6.2KΩ ±1%) [R13]
92	VRS-TS2AD623J	AA		C	Resistor (1/10W 62KΩ ±5%) [R222]
93	VRS-TS2AD624J	AA		C	Resistor (1/10W 620KΩ ±5%) [R216]
94	VRS-TS2AD752F	AA		C	Resistor (1/10W 7.5KΩ ±1%) [R227]
95	VRS-TS2AD752J	AA		C	Resistor (1/10W 7.5KΩ ±5%) [R217]
96	VRS-TS2AD753F	AA		C	Resistor (1/10W 75KΩ ±1%) [R8]
97	VRS-TW2ED560J	AA		C	Resistor (1/4W 56Ω ±5%) [R206]
98	VRS-TW2ED911J	AB		C	Resistor (1/4W 910Ω ±5%) [R14]
99	VRS-TX2HD470J	AA		C	Resistor (1/2W 47Ω ±5%) [R24]
100	VSDTA114YK/-1	AC		B	Transistor (DTA114YK) [Q14]
101	VSDTC114YK/-1	AC		B	Transistor (DTC114YK) [Q5,6,7,13]
102	VSiMB9AT110-1	AC		B	Transistor (IMB9AT110) [Q9]
103	VSiMH9AT110-1	AC		B	Transistor (IMH9AT110) [Q8]
104	VSUPA502T/-1	AD		B	Transistor (UPA502T) [Q1,2,3,4,204,205]
105	VS2SB1197/-1	AC		B	Transistor (2SB1197) [Q10,11,12,201]
106	VS2SB1198K/-1	AC		B	Transistor (2SB1198K) [Q202,203]
107	VS2SD1782K/-1	AC		B	Transistor (2SD1782K) [Q206]
	(Unit)				
901	CPWBN1258FC54	BZ		E	Operation control PWB (without FLASH PWB) [AR-280,285,335]

## 46 Operation control PWB(except for AR-280,285,335)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	VH i 28F161A04F	BN		B	Operation flash PWB (28F161A04F) [AR-405][for DIMM1]
	VH i 28F161A07F	BL	N	E	Operation flash PWB (28F161A07F) [AR-505][for DIMM1]
2	QCNCM0979FCZZ	AF		C	Connector (13Pin) [CN101,104]
3	QCNCM0980FCZZ	AF		C	Connector (10Pin) [CN102]
4	QCNCM0981FCZZ	AF		C	Connector (11Pin) [CN103]
5	QCNCM0982FCZZ	AF		C	Connector (12Pin) [CN204]
6	QCNCM0983FCZZ	AF		C	Connector (11Pin) [CN106]
7	QCNCM0984FCZZ	AD		C	Connector (3Pin) [CN202]
8	QCNCM0985FCZZ	AE		C	Connector (4Pin) [CN203]
10	QCNCW7191RC1B	AG		C	Connector (12Pin) [CN201]
11	QSOCZ0071FCZZ	AP		C	Socket (MM20-72B1-1) [DIMM1]
12	RCRMC1003YCZZ	AG		B	Crystal (EF0S1085E5) [X1]
13	RCRS-0032FCZZ	AH		B	Crystal (SMD-49 9.8304MHz) [X2]
14	RFiLF0031FCZZ	AD		B	Ferrite bead (ACA3216M4-120-T) [FB201,202]
15	RMPTW4103QCJJ	AB		B	Block resistor (10KΩ×4 1/32W ±5%) [BR207,213-223,228-238,247,249-252]
16	RMPTW4122QCJJ	AB		B	Block resistor (1.2KΩ×4 1/32W ±5%) [BR226,227,248]
17	RMPTW422QCJJ	AB		B	Block resistor (2.2KΩ×4 1/32W ±5%) [BR224,225]
18	RMPTW4334QCJJ	AB		B	Block resistor (330KΩ×4 1/32W ±5%) [BR203,204,206,209,210,212]
19	RMPTW4470QCJJ	AB		B	Block resistor (47Ω×4 1/32W ±5%) [BR205,211]
20	RMPTW4683QCJJ	AB		B	Block resistor (68KΩ×4 1/32W ±5%) [BR201,202,208,240]
21	RVR-M141JQCZZ	AC		B	Variable resistor (EVM3YSX50B14)(10KΩ) [VR1]
22	VCCCCY1HH101J	AA		C	Capacitor (50WV 100PF) [C222-229,243,244]

## 46 Operation control PWB(except for AR-280,285,335)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
23	VCCCCY1HH220J	AA		C	Capacitor (50WV 22PF) [C256,264]
24	VCEAPS1AC226M	AC		C	Capacitor (10WV 22μF) [C8,19]
25	VCEAPS1AC476M	AC		C	Capacitor (10WV 47μF) [C2,11]
26	VCEAPS1CC106M	AC		C	Capacitor (16WV 10μF) [C1]
27	VCEAPS1HC225M	AD		C	Capacitor (50WV 2.2μF) [C3]
28	VCEAPS1VC106M	AC		C	Capacitor (35WV 10μF) [C4,6]
29	VCEAPZ1AW477M	AE		C	Capacitor (10WV 470μF) [C10]
30	VCEAPZ1CW477M	AE		C	Capacitor (16WV 470μF) [C9]
31	VCEAPZ1HW107M	AF		C	Capacitor (50WV 100μF) [C7]
32	VCEAPZ1VW107M	AE		C	Capacitor (35WV 100μF) [C12]
33	VCEAPZ1VW476M	AE		C	Capacitor (35WV 47μF) [C5]
34	VCFYEC1HM103J	AD		C	Capacitor (50WV 0.010μF) [C236]
35	VCKYCY1CB473K	AB		C	Capacitor (16WV 0.047μF) [C273]
36	VCKYCY1HB102K	AA		C	Capacitor (50WV 1000PF) [C237,238,240]
37	VCKYCY1HB103K	AA		C	Capacitor (50WV 0.010μF) [C268,269]
38	VCKYCY1HB222K	AA		C	Capacitor (50WV 2200PF) [C242,245,253,271]
39	VCKYCY1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C201~221,230~235,246,248~250]
	VCKYCY1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C257~260,263,265~267,272,274]
40	VHDDAN202K/-1	AB		B	Diode (DAN202K) [D205,209,211,214,215,224,226]
41	VHDDAP202K/-1	AB		B	Diode (DAP202K) [D208,210,212,213,223,225]
42	VHDBR160L40-1	AD		B	Diode (RB160L40) [D207]
43	VHDBLS73///-1	AA		B	Diode (RLS73) [D201~204,227]
44	VHEZU5.1B1-1	AC		B	Zener diode (HZU5.1B1) [D206]
45	VHiBA033FP/-1	AH		B	IC (BA033FP) [IC206]
46	VHiHD6413003T	BA		B	IC (HD6413003T) [IC15]
47	VHiH256-20-8A	AY		B	IC (IS61C256AH-15J) [IC16,17]
48	VHiLM317MDT-1	AK		B	IC (LM317MDT) [IC201]
49	VHiLM339NS/-1	AD		B	IC (LM339NS) [IC11]
50	VHiLM358PS/-S	AC		B	IC (LM358PS) [IC205]
51	VHiMSM82C55GS	AS		B	IC (MSM82C55A-2GS-2K) [IC18]
52	VHiM5256DVP-1	AQ		B	IC (M5M5256DVP-10VXL) [IC203,204]
53	VHiM54587FP-1	AK		B	IC (M54587FP) [IC14]
54	VHiNJM78L05UA	AE		B	IC (NJM78L05UA) [IC202]
55	VHiSC908SF2V1	AW		B	IC (SC908SF2V1) [IC1]
56	VHiSN74HCT244	AF		B	IC (SN74HCT244) [IC4,19]
57	VHi74FCT244C1	AP		B	IC (74FCT244C1) [IC2]
58	VHi74FCT245T1	AR		B	IC (74FCT245C1) [IC3]
59	VHi74F32SJ/-1	AE		B	IC (74F32SJ) [IC7]
60	VHi74LVC04NS1	AH		B	IC (74LVC04NS1) [IC5]
61	VHi74LVC08NS1	AH		B	IC (74LVC08NS1) [IC8]
62	VHi74LVC32NS1	AH		B	IC (74LVC32NS1) [IC6]
63	VHi74LV04NS-1	AE		B	IC (74LV04NS) [IC9]
64	VHi74LV14NS-1	AF		B	IC (74LV14NS) [IC10]
65	VHi74VHCT04-1	AF		B	IC (74VHCT04) [IC12,13]
66	VHPLT1D67A/-1	AC		B	LED (LT1D67A) [D1]
67	VRS-TP2BD000J	AA		C	Resistor (1/8W 0Ω ±5%) [D228]
68	VRS-TP2BD271J	AA		C	Resistor (1/8W 270Ω ±5%) [R225]
69	VRS-TS2AD000J	AA		C	Resistor (1/10W 0Ω ±5%) [R286,289,290]
70	VRS-TS2AD103F	AA		C	Resistor (1/10W 10KΩ ±1%) [R239,240]
71	VRS-TS2AD103J	AA		C	Resistor (1/10W 10KΩ ±5%) [R212,218,227,228,229,232,238,243,245,247,248,250,251,252,280,291]
72	VRS-TS2AD105J	AA		C	Resistor (1/10W 1MΩ ±5%) [R224]
73	VRS-TS2AD122J	AA		C	Resistor (1/10W 1.2KΩ ±5%) [R246,262]
74	VRS-TS2AD123F	AA		C	Resistor (1/10W 12KΩ ±1%) [R281]
75	VRS-TS2AD151J	AA		C	Resistor (1/10W 150Ω ±5%) [R230]
76	VRS-TS2AD154F	AA		C	Resistor (1/10W 150KΩ ±1%) [R204]
77	VRS-TS2AD183F	AA		C	Resistor (1/10W 18KΩ ±1%) [R207,241]
78	VRS-TS2AD183J	AA		C	Resistor (1/10W 18KΩ ±5%) [R282]
79	VRS-TS2AD202J	AA		C	Resistor (1/10W 2KΩ ±5%) [R285]
80	VRS-TS2AD203J	AA		C	Resistor (1/10W 20KΩ ±5%) [R213,234,235,236,237]
81	VRS-TS2AD222J	AA		C	Resistor (1/10W 2.2KΩ ±5%) [R233,266]
82	VRS-TS2AD272J	AA		C	Resistor (1/10W 2.7KΩ ±5%) [R253,254,255]
83	VRS-TS2AD301F	AA		C	Resistor (1/10W 300Ω ±1%) [R208]
84	VRS-TS2AD303J	AA		C	Resistor (1/10W 30KΩ ±5%) [R217,226]
85	VRS-TS2AD304F	AA		C	Resistor (1/10W 300KΩ ±1%) [R203]
86	VRS-TS2AD333J	AA		C	Resistor (1/10W 33KΩ ±5%) [R283]
87	VRS-TS2AD334J	AA		C	Resistor (1/10W 330KΩ ±5%) [R216,219,220]
88	VRS-TS2AD363F	AA		C	Resistor (1/10W 36KΩ ±1%) [R206]
89	VRS-TS2AD473J	AA		C	Resistor (1/10W 47KΩ ±5%) [R209,210,211,214,221,222]
90	VRS-TS2AD564F	AC		C	Resistor (1/10W 560KΩ ±1%) [R202]
91	VRS-TS2AD622F	AA		C	Resistor (1/10W 6.2KΩ ±1%) [R201]
92	VRS-TS2AD623J	AA		C	Resistor (1/10W 62KΩ ±5%) [R284]
93	VRS-TS2AD624J	AA		C	Resistor (1/10W 620KΩ ±5%) [R244]
94	VRS-TS2AD752F	AA		C	Resistor (1/10W 7.5KΩ ±1%) [R242]
95	VRS-TS2AD752J	AA		C	Resistor (1/10W 7.5KΩ ±5%) [R231]
96	VRS-TS2AD753F	AA		C	Resistor (1/10W 75KΩ ±1%) [R205]
97	VRS-TW2ED560J	AA		C	Resistor (1/4W 56Ω ±5%) [R215]
98	VRS-TW2ED911J	AB		C	Resistor (1/4W 910Ω ±5%) [R223]



## 46 Operation control PWB(except for AR-280,285,335)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
99	VRS-TX2HD470J	AA		C	Resistor (1/2W 47Ω ±5%) [R1]
100	VSDTA114YK/-1	AC		B	Transistor (DTA114YK) [Q210]
101	VSDTC114YK/-1	AC		B	Transistor (DTC114YK) [Q211,218~220]
102	VSiMB9AT110-1	AC		B	Transistor (IMB9AT110) [Q214]
103	VSiMH9AT110-1	AC		B	Transistor (IMH9AT110) [Q213]
104	VSUPA502T/-1	AD		B	Transistor (UPA502T) [Q204,206~209,212]
105	VS2SB1197/-1	AC		B	Transistor (2SB1197) [Q203,215~217]
106	VS2SB1198K/-1	AC		B	Transistor (2SB1198K) [Q201,205]
107	VS2SD1782K/-1	AC		B	Transistor (2SD1782K) [Q202]
	(Unit)				
901	CPWBN1394FC51	BW		E	Operation control PWB (without FLASH PWB) [for AR-250,281,286,336,405]
	CPWBN1394FC52	BW	N	E	Operation control PWB (without FLASH PWB) [AR-505]

## 47 Operation PWB R

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	QCNCM0976FCZZ	AD		C	Connector (4Pin) [CNA]
2	QCNCM0977FCZZ	AF		C	Connector (9Pin) [CNB]
3	QCNCM0997FCZZ	AD		C	Connector (2Pin) [CNE]
4	QSW-P0465FCZZ	AC		B	Tact switch (SKHVPB) [1~9K,#K,K,INTK,CLK,CAK]
5	QSW-P0469FCZZ	AD		B	Push switch (SKHWAC) [OK,PSW]
6	RALMB1002LCZZ	AE		C	Alarm (PKM13EPY) [BZ1]
7	RCRS-0007FCZZ	AD		B	Crystal (CSB480EB) [X1]
8	VCEAJU1CW476M	AB		C	Capacitor (16WV 47μF) [C1]
9	VCKYPU1HB101K	AA		C	Capacitor (50WV 100PF) [C5,6]
10	VCKYPU1HF223Z	AA		C	Capacitor (50WV 0.022μF) [C2~4]
11	VHH103AT-2/-1	AG		B	Thermistor (103AT-2) [TH1]
12	VH1LR3717M/-1	AH		B	IC (LR3717M) [IC1]
13	VHPMPG3864K-J	AC		B	LED (MPG3864K) [RPL,RPL1]
14	VHPLT9400E/-1	AK		B	LED (LT9400E) [INTL]
15	VRD-HT2EY101J	AA		C	Resistor (1/4W 100Ω ±5%) [R5]
16	VRD-HT2EY102J	AA		C	Resistor (1/4W 1.0KΩ ±5%) [R4]
17	VRD-HT2EY121J	AA		C	Resistor (1/4W 120Ω ±5%) [R10]
18	VRD-HT2EY391J	AA		C	Resistor (1/4W 390Ω ±5%) [R9]
19	VSDTC114YS/-1	AB		B	Transistor (DTC114YS) [Q1]
	(Unit)				
901	CPWBF1255FC61	BH		E	Operation PWB R

## 48 Operation PWB L

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	QCNCM0977FCZZ	AF		C	Connector (9Pin) [CNC]
2	QCNCM0978FCZZ	AF		C	Connector (10Pin) [CND]
3	QSW-P0465FCZZ	AC		B	Tact switch (SKHVPB) [PRK,COK]
6	VHPMPG3864K-J	AC		B	LED (MPG3864K) [FDATA,FCON,PRT,PRT1,COPY,COPY1]
9	VRD-HT2EY331J	AA		C	Resistor (1/4W 330Ω ±5%) [R3,7]
10	VRD-HT2EY471J	AA		C	Resistor (1/4W 470Ω ±5%) [R1,2]
	(Unit)				
901	CPWBF1259FC62		N	E	Operation PWB L

## 49 Inverter PWB

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	QCNCW0399FCZZ	AB		C	Connector (4pin) [CN2]
2	QCNCW0759FCZZ	AC		C	Connector (3pin) [CN1]
3	RC-QZ0358FCZZ	AF		C	Capacitor (630WV 0.012μF) [C1]
4	RCiLF0068FCZZ	AF		C	Coil [L1]
5	RTRNZ0511FCZZ	AQ		B	Transformer [T1]
6	VCKYQY3FF220J	AC		C	Capacitor (22PF) [C2]
7	VRD-RC2EY103J	AA		C	Resistor (1/4W 10KΩ ±5%) [R1,2]
8	VS2SC3332-/-1	AE		B	Transistor (2SC3332) [Q1,2]
	(Unit)				
901	CPWBF1107FC52	AX		E	Inverter PWB

## 50 AC PWB

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	DHAI-2853FCZZ	AD		C	AC earth wire [F-GND]
2	PRDAF0071FCZZ	AK		C	Heat sink [for TD201,202]
3	QCNCM0672FCZZ	AB		C	Connector (2pin) [CN201]
4	QCNCM0895FCZZ	AG		C	Connector (3pin) [CN202]
5	QCNCM0989FCZZ	AG		C	Connector (3pin) [CN203]
6	QCNCW0458FCZZ	AD		C	Connector (20pin) [CN204]
10	QFS-B0030FCZZ	AH		A	Fuse (15A 250V)(100V series) [F201]
	QFS-C1500QCZZ	AF		A	Fuse (10A 250V)(200V series) [F201]
13	QFSHD0026FCZZ	AC		C	Fuse holder [for F201]
14	QTANP0115FCZZ	AB		C	Tab terminal (T86032) [Lin,Nin,Nout]
15	QTANP0116FCZZ	AA		C	Tab terminal (T46036) [except AR-505][NDH]
16	QTANP0189FCZZ	AC		C	Tab terminal (100V series) [Lout]
	QTANP0115FCZZ	AB		C	Tab terminal (T86032)(200V series) [Lout]
17	RC-QZ0314FCZZ	AH		C	Capacitor (XYE224472) [C203]
18	RCILF0031FCZZ	AR		C	Coil (100μH8A)(200V series) [L202,203]
19	RCILF0096FCZZ	AN		C	Coil (1MH15A)(200V series,and Taiwan(AR-280,285,335)) [L201]
20	RH-DZ0019FCZZ	AG		B	Diode (DSA-242MA)(100V series) [A201]
21	RMPTA0031FCZZ	AE		B	CR mix part (ECQ-J0186X)(0.1μF 120Ω) [CR201,202]
22	RR-WZ0328FCZZ	AD		C	Resistor (5W 3Ω)(100V series) [R205]
23	RRLYD3222QCZZ	AL		B	Relay (JQ1-24V) [RY201]
24	RRLYD4421QCN2	AU		B	Relay (Q4W-2212PFD)(100V series) [RY203]
	RRLYC4320QCZZ	AY		B	Relay (JC2AF)(200V series,except AR-505) [RY203]
25	RRLYD6121QCZZ	AM		B	Relay (G4W-1112PUS)(100V series) [RY202]
	RRLYD6120QCZZ	AP		B	Relay (G4W-1112PVD)(200V series) [RY202]
26	VCFYFU2ED474M	AG		C	Capacitor (0.47μF)(Taiwan,for AR-280,285,335) [C204]
	VCFYFU2ED474M	AG		C	Capacitor (0.47μF)(200V series) [C205]
27	VCFYRT2EC105K	AL		C	Capacitor (1.0μF)(200V series) [C204]
28	VCQYNU1HM104K	AB		C	Capacitor (50WV 0.10μF)(except for Taiwan(AR-280,285,335)) [C201,202]
29	VHDDSS133/-1	AA		B	Diode (DSS133) [except AR-505][D201,202,203]
	VHDDSS133/-1	AA		B	Diode (DSS133) [AR-505]
34	VHRS11MD5V/-1	AF		B	Photo thyristor (S11MD5V)(100V series(AR-280,285,335)) [SSR201,202]
	VHRS21MD3V/-1	AE		B	Photo thyristor (S21MD3V) (except for 100V series(AR-280,285,335)) [SSR201,202]
35	VHSTM1641P-LF	AQ		B	Thyristor (TM1641P-LF)(100V series) [TD201,202]
	VHSTM1661P-LF	AQ		B	Thyristor (TM1661P-LF)(200V series) [TD201,202]
36	VRD-HT2EY105J	AA		C	Resistor (1/4W 1.0MΩ ±5%)(100V series) [R206]
	VRD-HT2HY274J	AA		C	Resistor (1/2W 270KΩ ±5%)(200V series) [R206]
38	VRS-HT2HA101J	AA		C	Resistor (1/2W 100Ω ±5%) [R201,203]
39	VRS-HT2HA121J	AA		C	Resistor (1/2W 120Ω ±5%)(100V series) [R202,204]
	VRS-HT2HA201J	AA		C	Resistor (1/2W 300Ω ±5%)(200V series) [R202,204]
42	XBPSD30P10K00	AA		C	Screw (3×10K) [for TD201,202]
	(Unit)				
901	CPWBF1306FC51	BS		E	AC PWB (Taiwan only) [AR-280,285,335]
	CPWBF1290FC51	BN		E	AC PWB (100V series,except Taiwan) [AR-280,285,335]
	CPWBF1395FC51	BQ		E	AC PWB (100V series) [except AR-280,285,335,505]
	CPWBF1291FC51	BR		E	AC PWB (200V series) [except AR-505]
	CPWBF1395FC52	BM	N	E	AC PWB (100V series) [AR-505]
	CPWBF1291FC52	BR	N	E	AC PWB (200V series) [AR-505]

## 51 Scanner drive PWB

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	QCNCM7014SC0F	AB		C	Connector (6pin) [CN-3]
2	QCNCM7014SC1C	AC		C	Connector (13pin) [CN-2]
3	QCNCW0948FCZ3	AC		C	Connector (3pin) [CN-1]
4	RMPTC7103QCJB	AB		B	Block resistor (10KΩ×7 1/8W ±5%) [BR2]
5	RMPTC8103QCJB	AC		B	Block resistor (10KΩ×8 1/8W ±5%) [BR1]
6	VCEAZU1HW105M	AB		C	Capacitor (50WV 1μF) [C2]
7	VCEAZU1HW477M	AE		C	Capacitor (50WV 470μF) [C1]
8	VHiSTK67250-1	BB		B	IC (STK67250) [IC3]
9	VHiTD62504/-1	AG		B	IC (TD62504) [IC1,2]
10	VRNRC2EK2201F	AA		C	Resistor (1/4W 2.20KΩ ±1%) [R1,5]
11	VRNRC2EK2700F	AB		C	Resistor (1/4W 270Ω ±1%) [R3]
12	VRNRC2EK8200F	AA		C	Resistor (1/4W 820Ω ±1%) [R2]
13	VRD-RC2EY163J	AA		C	Resistor (1/4W 16KΩ ±5%) [R7,8]
	(Unit)				
901	CPWBF1279FC52	BD		E	Scanner drive PWB

## 52 ORS PD PWB

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	QCNCM0542FCZZ	AC		C	Connector (6pin) [CN1]
2	RC-KZ2005SCZZ	AA		C	Capacitor (25WV 0.01μF) [C2,4]
3	RMPTC3272QCJB	AA		B	Block resistor (2.7KΩ×3 1/8W ±5%) [BR1]
4	VCKYPU1HB102K	AA		C	Capacitor (50WV 0.001μF) [C5]
5	VCKYPU1HB681K	AA		C	Capacitor (50WV 680PF) [C1]
6	VCQYNA1HM682K	AA		C	Capacitor (50WV 6800PF) [C3]
7	VHDDSS133// -1	AA		B	Diode (DSS133) [D1,2]
8	VHILM358P// -1	AG		B	IC (LM358P) [IC2]
9	VHITC4051BP-1	AQ		B	IC (TC4051BP) [IC1]
10	VHPPD49Pi// -1	AE		B	Photo sensor (PD49PI) [PD2~7]
11	VRD-HT2EY104J	AA		C	Resistor (1/4W 100KΩ ±5%) [R1]
12	VRD-HT2EY274J	AA		C	Resistor (1/4W 270KΩ ±5%) [R2]
13	VRD-HT2EY303J	AA		C	Resistor (1/4W 30KΩ ±5%) [R4]
14	VRD-HT2EY471J	AA		C	Resistor (1/4W 470Ω ±5%) [R3]
	(Unit)				
901	CPWBF1294FC32	AX		E	ORS PD PWB

## 53 DC Power supply PWB.. [AR-405,505(100V series)]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0AV1390000149	AS		C	Aluminum Electrolytic capacitor (1000μF 200V) [C709,710]
2	0AV1471830090	AD		C	Film capacitor (0.018μF 100V) [C715]
3	0AV1550000003	AL		C	Film capacitor (0.47μF 250V) [C701,702]
4	0AV14800000073	AG		C	Film capacitor (0.15μF 400V) [C711]
5	0AV16100000039	AB		C	Ceramic capacitor (330pF 2KV) [C712,777]
6	0AV16100000034	AD		C	Ceramic capacitor (680pF 1KV) [C713,714,753,754]
7	0AV16100000067	AC		C	Ceramic capacitor (1000pF 1KV) [C720,751,752,757~760,771,772,782]
8	0AV16500000068	AD		C	Ceramic capacitor (3300pF (KH)) [C703~708]
9	0AV16100000056	AD		C	Ceramic capacitor (0.01μF 50V) [C719]
10	0AV16900000001	AB		C	Ceramic capacitor (0.1μF 50V) [C718,764,766,781]
11	0AV16100000066	AD		C	Ceramic capacitor (0.022μF 50V) [C769]
12	0AV13900000107	AC		C	Aluminum Electrolytic capacitor (0.47μF 50V) [C770]
13	0AV13900000108	AC		C	Aluminum Electrolytic capacitor (22μF 35V) [C716,763,780]
14	0AV13900000109	AC		C	Aluminum Electrolytic capacitor (47μF 35V) [C717,767,775,776,778]
15	0AV13900000140	AE		C	Aluminum Electrolytic capacitor (2.2μF 315V) [C783]
16	0AV13900000136	AF		C	Aluminum Electrolytic capacitor (1000μF 25V) [C774]
17	0AV13900000137	AG		C	Aluminum Electrolytic capacitor (1000μF 50V) [C755,756]
18	0AV13900000139	AG		C	Aluminum Electrolytic capacitor (1800μF 35V) [C761,762,768]
19	0AV13900000135	AG		C	Aluminum Electrolytic capacitor (1000μF 35V) [C765]
20	0AV3050038000	AF		B	Diode (ERC38-06) [D703]
21	0AV3050079000	AG		B	Diode (YG911S2) [D767]
22	0AV3050086000	AB		B	Diode (1SS270) [D753,756,757,760,763,765,768]
	0AV3050086000	AB		B	Diode (1SS270) [D770,772,773,774,776,779,782]
23	0AV3060040000	AR		B	Diode (D15XB60) [D701]
24	0AV3060021000	AB		B	Diode (ERA15-01) [D769,777,780]
25	0AV3050069000	AE		B	Diode (ERA38-05) [D708,709,710]
26	0AV3050019000	AF		B	Diode (ERA91-02) [D702]
27	0AV3060041000	AD		B	Diode (ERB12-06) [D704,705]
28	0AV3050033000	AE		B	Diode (ERB91-02) [D778]
29	0AV3050082000	AQ		B	Diode (ESAD92M-02F157) [D754]
30	0AV3050083000	AR		B	Diode (ESAD92M-03F157) [D751]
31	0AV3070044000	AB		B	Zenner diode (RD16ES) [D758,764]
32	0AV3070097000	AC		B	Zenner diode (RD30ES) [D707,755]
33	0AV3070061000	AC		B	Zenner diode (RD4.7ES) [D759,761,775]
34	0AV3070077000	AE		B	Zenner diode (RD47E) [D752]
35	0AV3070042000	AB		B	Zenner diode (RD5.6ES) [D762]
36	0AV3070103000	AC		B	Diode (RD8.2ES) [D706,766]
37	0AV3050036000	AF		B	Diode (RG1C) [D781,783]
38	0AV3050070000	AK		B	Diode (YG802C06) [D771]
39	0AV5060031000	AG		A	Fuse (125V 6.3A) [F701,703,709]
40	0AV5060059000	AG		A	Fuse (250V 3A) [F706,707,708]
41	0AV5060077000	AF		A	Fuse (125V 5A) [F711]
42	0AV5070000013	AF		A	Thermal fuse (127) [F710]
43	0AV2060012000	AH		A	Thermal cutoff with resistor (3.3Ω 135) [FR701]
44	0AV3090071000	AN		B	IC (PQ3RD23) [IC753]
45	0AV3090046000	AN		B	IC (PQ12RF21) [IC752]
46	0AV3090041000	AF		B	IC (UPC1093J-1) [IC751]
47	0AV3090072000	AG		B	IC (UPC79L05J-1) [IC754]
48	0AV4070055000	AR		C	Line filter (DR25AJ-1020) [L701]
49	0AV4050005000	AD		C	Choke coil (TSL1110-332KR17) [L705]
50	0AV4080006000	AS		C	Choke coil (OH-104SZ) [L767]
51	0AV4120002000	AC		C	Inductor (B-01-A) [L702,703]
52	0AV4020034611	BE		C	Choke coil (C-L00-346) [L757]
53	0AV4120007000	AD		C	Inductor (LFP2B-M3A0TA) [L704,751~756,758~764,768]

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## 53 DC Power supply PWB-[AR-405,505(100V series)]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
54	0AV4120008000	AD		C	Inductor (LFP3A-M3A0TA) [L769,770]
55	0AV4050016000	AG		C	Choke coil (PC-8T8R2M) [L766]
56	0AV3082561300	AF		B	Photo coupler (PS2561) [PC701~704]
57	0AV3021815500	AC		B	Transistor (2SC1815) [Q703,751,752]
58	0AV3022655500	AE		B	Transistor (2SC2655) [Q753]
59	0AV3040176999	AN		B	FET (2SJ176) [Q754]
60	0AV3041168000	AW		B	FET (2SK1168) [Q701,702]
61	0AV3021004999	AD		B	Transistor (RN1004) [Q704]
62	0AV2043303030	AC		B	Fusing resistor (33Ω 1/2W) [R713,714]
63	0AV2044773030	AC		B	Fusing resistor (4.7Ω 1/2W) [R787]
64	0AV2041003030	AC		B	Fusing resistor (10Ω 1/2W) [R788]
65	0AV2051094075	AG		B	Cement filled resistor (0.01Ω 5W) [R779]
66	0AV2055094075	AF		B	Cement filled resistor (0.05Ω 5W) [R715,716]
67	0AV2053374087	AH		B	Cement filled resistor (3.3Ω 7W) [R702]
68	0AV2011013010	AA		C	Flame proof fixed carbon film resistor (100Ω 1/6W) [R760,783,785]
69	0AV2011023010	AA		C	Flame proof fixed carbon film resistor (1KΩ 1/6W) [R703]
70	0AV2011033010	AA		C	Flame proof fixed carbon film resistor (10KΩ 1/6W) [R727,728]
71	0AV2011043010	AA		C	Flame proof fixed carbon film resistor (100KΩ 1/6W) [R731]
72	0AV2011223010	AA		C	Flame proof fixed carbon film resistor (1.2KΩ 1/6W) [R759]
73	0AV2011243010	AA		C	Flame proof fixed carbon film resistor (120KΩ 1/6W) [R765]
74	0AV2011533010	AA		C	Flame proof fixed carbon film resistor (15KΩ 1/6W) [R720,768,769]
75	0AV2012223010	AA		C	Flame proof fixed carbon film resistor (2.2KΩ 1/6W) [R762,767,781]
76	0AV2012723010	AA		C	Flame proof fixed carbon film resistor (2.7KΩ 1/6W) [R730,770,780]
77	0AV2013033010	AA		C	Flame proof fixed carbon film resistor (30KΩ 1/6W) [R766]
78	0AV2013323010	AA		C	Flame proof fixed carbon film resistor (3.3KΩ 1/6W) [R758,786]
79	0AV2013333010	AA		C	Flame proof fixed carbon film resistor (33KΩ 1/6W) [R764]
80	0AV2014703010	AA		C	Flame proof fixed carbon film resistor (47Ω 1/6W) [R756]
81	0AV2014723010	AA		C	Flame proof fixed carbon film resistor (4.7KΩ 1/6W) [R757,761,763]
82	0AV2011213020	AA		C	Flame proof fixed carbon film resistor (120Ω 1/4W) [R774,775]
83	0AV2012213020	AA		C	Flame proof fixed carbon film resistor (220Ω 1/4W) [R773]
84	0AV2014723020	AA		C	Flame proof fixed carbon film resistor (4.7KΩ 1/4W) [R771,777]
85	0AV2014773020	AA		C	Flame proof fixed carbon film resistor (4.7Ω 1/4W) [R719,776]
86	0AV2011043030	AA		C	Flame proof fixed carbon film resistor (100KΩ 1/2W) [R701]
87	0AV2011823030	AB		C	Flame proof fixed carbon film resistor (1.8KΩ 1/2W) [R791]
88	0AV2011843030	AB		C	Flame proof fixed carbon film resistor (180KΩ 1/2W) [R789,790]
89	0AV2041013010	AC		B	Fusing resistor (100Ω 1/6W) [R718,778]
90	0AV2042203010	AC		B	Fusing resistor (22Ω 1/6W) [R721,729,772]
91	0AV2048203010	AC		B	Fusing resistor (82Ω 1/6W) [R717]
92	0AV2041033020	AC		B	Fusing resistor (10KΩ 1/4W) [R711,712]
93	0AV2022233060	AC		C	Fixed metal oxide resistor (22KΩ 3W) [R708,709]
94	0AV2022213070	AF		C	Fixed metal oxide resistor (220Ω 5W) [R753,792]
95	0AV2024703070	AF		C	Fixed metal oxide resistor (47Ω 5W) [R710,751,752,754,755]
96	0AV2021033040	AC		C	Fixed metal oxide resistor (10KΩ 1W) [R722,723,724]
97	0AV2022203040	AC		C	Fixed metal oxide resistor (22Ω 1W) [R782]
98	0AV2022733040	AC		C	Fixed metal oxide resistor (27KΩ 1W) [R706,707,725,726]
99	0AV2023923040	AC		C	Flame proof fixed carbon film resistor (3.9KΩ 1W) [R784]
100	0AV2026803040	AC		C	Fixed metal oxide resistor (68Ω 1W) [R704,705]
101	0AV5140020000	AK		C	Posi-R (ZPC25CE8R2F1UC) [TH701]
102	0AV3160031000	AR		B	Triac (BCR16PM-8LP-A8) [TR701]
103	0AV4000114011	BC		B	Transformer (N-T01-140) [T701]
104	0AV2081029181	AH		B	Carbon trimmer (1KΩ) [VR701,702]
105	0AV5050005000	AA		C	Fuse holder (PFC5000-0203)
106	0AV5130008000	AC		C	Terminal (TP00370-41)
107	0AV5130007000	AC		C	Terminal (ST-2-1)
108	0AV5030036000	AC		C	Connector (B2P3-VH) [CN701]
109	0AV5030105000	AM		C	Connector (B30B-XADSS-F) [CN702]
110	0AV5030106000	AL		C	Connector (B26B-XADSS-F) [CN703]
111	0AV5030107000	AN		C	Connector (B34B-XADSS-F) [CN704]
112	0AV5030108000	AK		C	Connector (B18B-XADSS-F) [CN705]
113	0AV5030109000	AD		C	Connector (B3B-XASK-1) [CN706]
114	0AV5030114000	AF		C	Connector (B08B-XASK-1) [CN707]
115	0AV6113101611	AQ		C	Heat sink (LM31016)
116	0AV8117730514	AB		C	Screw (M3×10)
141	0AV16100000036	AC		C	Ceramic capacitor (220pF 50V) [C3]
142	0AV16100000056	AD		C	Ceramic capacitor (0.01μF 50V) [C1]
143	0AV1390000131	AD		C	Aluminum Electrolytic capacitor (2.2μF 50V) [C4]
144	0AV1390000132	AD		C	Aluminum Electrolytic capacitor (0.47μF 50V) [C2]
145	0AV3090073000	AP		B	IC (M51995AP) [IC1]
146	0AV3021815500	AC		B	Transistor (2SC1815) [Q1]
147	0AV2011033010	AA		C	Flame proof fixed carbon film resistor (10KΩ 1/6W) [R2]
148	0AV2012733010	AA		C	Flame proof fixed carbon film resistor (27KΩ 1/6W) [R7]
149	0AV2013033010	AA		C	Flame proof fixed carbon film resistor (30KΩ 1/6W) [R6]
150	0AV2013323010	AA		C	Flame proof fixed carbon film resistor (3.3KΩ 1/6W) [R5]
151	0AV2013333010	AA		C	Flame proof fixed carbon film resistor (33KΩ 1/6W) [R3]
152	0AV5030103000	AF		C	Connector (50055-8109) [CNA]
161	0AV16100000055	AD		C	Ceramic capacitor (0.001μF 50V) [C2,5]
162	0AV1610000001	AB		C	Ceramic capacitor (0.1μF 50V) [C1]
163	0AV16900000066	AD		C	Ceramic capacitor (0.022μF 50V) [C3,4]
164	0AV3050086000	AB		B	Diode (1SS270) [D1]
165	0AV3090008000	AK		B	IC (MB3759M) [IC1]

## 53 DC Power supply PWB-[AR-405,505(100V series)]

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
166	0AV2011033010	AA		C	Flame proof fixed carbon film resistor (10KΩ 1/6W) [R3]
167	0AV2011233010	AA		C	Flame proof fixed carbon film resistor (12KΩ 1/6W) [R1]
168	0AV2012223010	AA		C	Flame proof fixed carbon film resistor (2.2KΩ 1/6W) [R7,9]
169	0AV2012233010	AA		C	Flame proof fixed carbon film resistor (22KΩ 1/6W) [R8]
170	0AV2013323010	AA		C	Flame proof fixed carbon film resistor (3.3KΩ 1/6W) [R5]
171	0AV2014723010	AA		C	Flame proof fixed carbon film resistor (4.7KΩ 1/6W) [R2]
172	0AV2015623010	AA		C	Flame proof fixed carbon film resistor (5.6KΩ 1/6W) [R6]
173	0AV2990037000	AB		C	Metal film resistor (1KΩ 1/6W) [R11]
174	0AV2990038000	AB		C	Metal film resistor (47KΩ 1/6W) [R10]
175	0AV5030104000	AE		C	Connector (50055-8108) [CNA]
176	0AV6111017811	AZ		C	Chassi (LM10178)
177	0AV6113101711	AR		C	Heat sink (LM31017)
178	0AV6114101711	AH		C	Connector panel (LM41017)
179	0AV6114058511	AG		C	Support plate (LM40585)
180	0AV6114026411	AE		C	Support plate (LM40264)
181	0AV7200004000	AD		C	Tube (UA-45T-13R5-30)
182	0AV8140230314	AA		C	Screw (M3×6)
183	0AV8112230714	AA		C	Screw (M3×14)
184	0AV8112230314	AA		C	Screw (M3×6)
185	0AV7414111411	AD		C	Label (LV41141)
186	0AV7414119011	AD		C	Label (LV41190)
	(Unit)				
901	CPWBF1386FC31	CA		E	DC Power supply PWB (100V series)

## 54 DC Power supply PWB-200V series(and 100V series except AR-405,505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0FT23006212//	AP		B	IC (MB3759M) [Z1]
2	0FT23287815//	AF		C	Chemical capacitor (KME50VB-22FC)@ [C1]
3	0FT23259285//	AF		C	Chemical capacitor (KME50VB-10FC)@ [C6]
4	0FT23087743//	AD		C	Film capacitor (AMZF-472K50) [C4]
5	0FT23090523//	AD		C	Film capacitor (AMZF-473K50) [C7]
6	0FT23418685//	AC		C	Carbon resistor (RDMF14-FX 12KΩJ) [R2]
7	0FT23418634//	AC		C	Carbon resistor (RDMF14-FX 5.6KΩJ) [R3,845]
8	0FT23419401//	AC		C	Carbon resistor (RDF14-FB 1KΩJ) [R1,5]
9	0FT23419010//	AC		C	Carbon resistor (RDMF14-FX 1MΩJ) [R6]
10	0FT23419452//	AC		C	Carbon resistor (RDF14-FB 2.2KΩJ) [R8]
11	0FT23539423//	AK		C	Connector (MDF14A-8P-2.5DS) [PN1]
12	0FT23555402//	AD		C	Fuse holder (EYF-52LCZ) [F701]
13	0FT31541328//	AU		C	Reactor (EXL42850-174) [L704]
14	0FT23642925//	AK		C	Reactor (CX40357-006) [L705,707,713]
15	0FT23642909//	AK		C	Reactor (CX40357-004) [L706,710,715]
16	0FT23642917//	AG		C	Reactor (CX40357-005) [L708,714]
17	0FT23381072//	AR		C	Reactor (HK-08S070-6500) [L709]
18	0FT23375323//	AR		C	Reactor (HK-10S100-4500) [L711]
19	0FT23353524//	AU		C	Reactor (HK-14S160-5000) [L712]
20	0FT23606732//	AD		B	Diode (S5688G) [D707,710,734,735]
21	0FT23601552//	AF		B	Diode (1GU42) [D711,713,732,770]
22	0FT23078876//	AH		B	Diode (RK44) [D719]
23	0FT23138429//	AK		B	Diode (RL2ZP) [D725]
24	0FT23195236//	AC		B	Diode (1SS119-14) [D2,723,751,753,756,761,762,764,772,773,779]
25	0FT23246205//	AF		B	Zener diode (RD6.2ES-B2) [D709]
26	0FT23242382//	AK		B	Diode (RK34) [D768]
27	0FT23606910//	AE		B	Zener diode (RD4.7ES-B2) [D720,721]
28	0FT23355705//	AF		B	Zener diode (RD6.8ES-B2) [D724]
29	0FT23288153//	AE		B	Zener diode (RD27ES-B2) [D752]
30	0FT23291235//	AE		B	Zener diode (RD12ES-B3) [D706,776]
31	0FT23265420//	AE		B	Zener diode (RD24ES-B2) [D712,749,750]
32	0FT23483428//	AF		B	Zener diode (RD2.0ES-B2) [D777]
33	0FT23223116//	AF		B	Zener diode (RD13ES-B2) [D757]
34	0FT23783413//	AF		B	Zener diode (RD10ES-B2) [D760]
35	0FT23574342//	AE		B	Zener diode (RD5.1ES-B2) [D780]
36	0FT23400433//	AF		B	Zener diode (RD3.6ES-B2) [D763]
37	0FT33145594//	AX		B	Rectifier (PBS2506GCA) [RC702]
38	0FT23246191//	AF		B	Zener diode (RD5.6ES-B2) [D765]
39	0FT23198634//	AF		B	Zener diode (RD6.8ES-B3) [D766,767]
40	0FT23413403//	AU		B	Rectifier (ESAD92M-03) [RC705]
41	0FT23256189//	AF		B	Zener diode (RD2.7ES-B2) [D774]
42	0FT23772853//	AP		B	Rectifier (F10P06Q) [RC706]
43	0FT23709604//	AP		B	Rectifier (D15SCA4M) [RC708]
44	0FT23429784//	AU		B	Rectifier (ESAD92M02) [RC704]
45	0FT23776506//	AP		B	Rectifier (F8P04Q) [RC707]
46	0FT23312208//	AU		B	Transistor (2SA1568) [Q712]
47	0FT23700801//	AL		B	Rectifier (D5SC4M) [RC709]
48	0FT23104907//	AF		B	Transistor (2SC2655) [Q722,725]
49	0FT23149366//	AH		B	Transistor (2SC2655-Y) [Q706]

## 54 DC Power supply PWB..200V series(and 100V series except AR-405,505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
50	0 F T 2 3 4 0 5 0 8 7 //	AN		B	Transistor (2SC3852A) [Q707]
51	0 F T 2 3 0 5 5 1 5 9 //	AD		B	Transistor (2SC1815-Y) [Q727,728,729]
52	0 F T 2 3 0 7 8 3 6 1 //	AH		B	Transistor (2SA1020) [Q705,723,726]
53	0 F T 2 3 0 8 0 9 8 6 //	AG		B	Transistor (2SC1815) [Q701,711,724]
54	0 F T 3 3 0 0 1 4 6 0 //	AK		B	Photo coupler (PC123FY) [PC701,702,703]
55	0 F T 3 3 3 0 9 9 9 6 //	AX		B	FET (2SJ374) [Q721,732]
56	0 F T 2 3 2 5 9 3 0 7 //	AH		C	Chemical capacitor (KME63VB-100) [C731]
57	0 F T 2 3 6 3 9 7 8 9 //	AS		B	IC (FA5310P) [Z701]
58	0 F T 2 3 1 8 8 6 5 5 //	AP		C	Chemical capacitor (KME25VB-2200) [C754,755]
59	0 F T 2 3 6 7 1 6 5 8 //	AP		B	IC (UPC78M05AHF) [Z704]
60	0 F T 2 3 1 6 5 1 7 5 //	AH		C	Chemical capacitor (KME35VB-470) [C764]
61	0 F T 2 3 3 0 7 0 6 9 //	AP		C	Chemical capacitor (KME50VB-1000) [C757]
62	0 F T 2 3 1 8 8 7 2 8 //	AP		C	Chemical capacitor (KME35VB-2200) [C760,761,762,766,767]
63	0 F T 2 3 1 5 0 5 2 6 //	AN		C	Chemical capacitor (KME35VB-1000) [C791]
64	0 F T 2 3 2 6 2 4 6 4 //	AU		C	Chemical capacitor (KME35VB-3300) [C769,770,817]
65	0 F T 2 3 2 3 9 8 3 7 //	AK		C	Chemical capacitor (KME35VB-100FC) [C713,779]
66	0 F T 2 3 2 9 2 7 6 2 //	AL		C	Chemical capacitor (KME50VB-330) [C790]
67	0 F T 2 3 0 8 8 4 2 1 //	AK		C	Chemical capacitor (KME10VB-2200) [C802,803,804,806,807,808,813,814]
68	0 F T 2 3 2 5 9 2 6 9 //	AF		C	Chemical capacitor (KME50VB-1FC) [C788,801,805,818]
69	0 F T 2 3 1 2 4 9 1 6 //	AK		C	Chemical capacitor (KME25VB-1000) [C796,797,809]
70	0 F T 3 3 0 5 4 2 4 6 //	AK		C	Film capacitor (3362-474) [C707]
71	0 F T 2 3 2 5 9 2 4 2 //	AF		C	Chemical capacitor (KME25VB-220FC) [C822]
72	0 F T 2 3 1 1 1 6 6 0 //	AK		C	Chemical capacitor (KME10VB-1000) [C851]
73	0 F T 3 3 0 5 7 2 8 8 //	AK		C	Film capacitor (3362-105) [C701]
74	0 F T 2 3 0 9 7 1 5 3 //	AG		C	Film capacitor (AMZF-223K50) [C710]
75	0 F T 2 3 0 9 0 5 3 1 //	AD		C	Film capacitor (AMZF-104K50) [C712,722,726,756,765]
76	0 F T 2 3 3 8 2 0 7 9 //	AG		C	Film capacitor (MMT-224J50) [C719,778]
77	0 F T 2 3 6 1 1 3 2 9 //	AK		C	Film capacitor (MMC-104K400) [C752,771,811,812]
78	0 F T 2 3 0 9 0 2 8 0 //	AD		C	Film capacitor (AMZF-103K50) [C2,709,800,819,820,824]
79	0 F T 2 3 4 1 2 6 4 4 //	AH		C	Ceramic capacitor (RPE132CH391J50) [C721]
80	0 F T 2 3 5 3 0 0 3 5 //	AH		C	Ceramic capacitor (DE5075-742SL470J2K) [C724]
81	0 F T 3 3 1 6 7 2 8 8 //	AF		C	Ceramic capacitor (DE1007E222M-KH) [C702,703,730]
82	0 F T 2 3 5 1 5 1 1 7 //	AF		C	Ceramic capacitor (DE0905-742R102K1K) [C744,745,746,747,748,749,750,751]
83	0 F T 2 3 5 1 5 1 0 9 //	AE		C	Ceramic capacitor (DE0705-742R471K1K) [C732,740,763]
84	0 F T 3 3 2 9 3 9 7 6 //	AF		C	Ceramic capacitor (DD104-63CH470J50) [C799]
85	0 F T 2 3 6 4 4 6 4 2 //	AG		B	Variable resistor (EVM-4LGA00B23) [RV702,705]
86	0 F T 2 3 6 4 4 6 5 0 //	AL		B	Variable resistor (EVM-4LGA00B53) [RV703]
87	0 F T 2 3 5 9 3 2 8 2 //	AH		C	Ceramic capacitor (DE506-63R102K250) [C780,781,784,785,792,793,794,795]
88	0 F T 2 3 5 1 9 3 8 4 //	AK		B	Cement resistor (BPR26 2W 0.02ΩK) [R806,807]
89	0 F T 2 3 3 7 1 1 5 8 //	AK		B	Cement resistor (BPR26 2W 0.01ΩK) [R815]
90	0 F T 2 3 6 4 4 6 3 4 //	AK		B	Variable resistor (EVM-4LGA00B13) [RV704]
91	0 F T 2 3 3 7 1 1 6 6 //	AK		B	Cement resistor (BPR26 2W 0.05ΩK) [R792]
92	0 F T 2 3 5 3 7 1 3 7 //	AD		C	Metal film resistor (RSMF12B 22ΩJ) [R734,735,736]
93	0 F T 2 3 5 3 7 0 8 0 //	AD		C	Metal film resistor (RSMF12B 2.2ΩJ) [R756,766,770,828]
94	0 F T 3 3 0 5 6 7 8 8 //	AD		C	Metal film resistor (RSMF1RB 2.2ΩJ) [R718]
95	0 F T 2 3 7 8 2 9 4 8 //	AD		C	Metal film resistor (RSMF2RB 15ΩJ) [R719,720]
96	0 F T 3 3 0 2 4 2 6 6 //	AD		C	Metal film resistor (RSMF2RB 6.8KΩJ) [R833]
97	0 F T 2 3 7 0 7 5 5 5 //	AD		C	Metal film resistor (RSMF2RB 47ΩJ) [R849]
98	0 F T 2 3 7 3 7 7 4 8 //	AD		C	Metal film resistor (RSMF2RB 68ΩJ) [R852]
99	0 F T 2 3 7 0 7 5 9 8 //	AD		C	Metal film resistor (RSMF1RB 22ΩJ) [R749,750]
100	0 F T 2 3 7 8 2 3 2 8 //	AD		C	Metal film resistor (RSMF2RB 22ΩJ) [R751,752]
101	0 F T 2 3 7 0 7 5 2 0 //	AD		C	Metal film resistor (RSMF2RB 1KΩJ) [R757,771,772,773]
102	0 F T 2 3 7 6 5 3 8 5 //	AD		C	Metal film resistor (RSMF1RB 10ΩJ) [R744,784,788,836,840]
103	0 F T 2 3 7 5 5 9 2 //	AD		C	Metal film resistor (RSMF2RB 2.2KΩJ) [R832]
104	0 F T 2 3 5 3 7 0 1 3 //	AD		C	Metal film resistor (RSMF12B 0.22ΩJ) [R835]
105	0 F T 2 3 5 3 8 0 3 6 //	AD		C	Metal film resistor (RSMF2B 1KΩJ) [R846]
106	0 F T 2 3 5 3 7 1 2 9 //	AD		C	Metal film resistor (RSMF12B 15ΩJ) [R855,861]
107	0 F T 2 3 4 1 8 6 2 6 //	AC		C	Carbon resistor (RDMF14-FX 5.1KΩJ) [R733]
108	0 F T 2 3 4 1 9 6 8 1 //	AC		C	Carbon resistor (RDF14-FB 100KΩJ) [R754]
109	0 F T 2 3 7 6 5 4 0 7 //	AD		C	Metal film resistor (RSMF1RB 1.5KΩJ) [R857,858,863,864]
110	0 F T 2 3 5 1 6 2 6 1 //	AD		C	Metal film resistor (RSMF12B 10ΩJ) [R737,865]
111	0 F T 2 3 4 1 8 5 5 3 //	AC		C	Carbon resistor (RDMF14-FX 2.2KΩJ) [R7,9,707,739,758,760]
112	0 F T 2 3 4 1 8 5 8 8 //	AC		C	Carbon resistor (RDMF14-FX 3.3KΩJ) [R4,709,761]
113	0 F T 2 3 4 1 8 7 1 5 //	AC		C	Carbon resistor (RDMF14-FX 22KΩJ) [R722]
114	0 F T 2 3 4 1 8 6 9 3 //	AC		C	Carbon resistor (RDMF14-FX 15KΩJ) [R730,826]
115	0 F T 2 3 4 1 8 8 2 0 //	AC		C	Carbon resistor (RDMF14-FX 180KΩJ) [R798,839,843]
116	0 F T 2 3 4 1 8 3 8 3 //	AC		C	Carbon resistor (RDMF14-FX 100ΩJ) [R731,803,804,805,844,850,872]
117	0 F T 2 3 4 1 8 8 0 4 //	AC		C	Carbon resistor (RDMF14-FX 100KΩJ) [R762,777]
118	0 F T 2 3 4 1 8 2 5 1 //	AC		C	Carbon resistor (RDMF14-FX 10ΩJ) [R795,811,819]
119	0 F T 2 3 4 1 8 5 1 0 //	AC		C	Carbon resistor (RDMF14-FX 1KΩJ) [R708,717,732,759,779,781,782,783,794,796,812,813,820,821,834,856,862]
120	0 F T 2 3 4 1 8 2 2 7 //	AC		C	Carbon resistor (RDMF14-FX 5.6ΩJ) [R793]
121	0 F T 2 3 4 1 9 3 1 2 //	AC		C	Carbon resistor (RDF14-FB 220ΩJ) [R822]
122	0 F T 2 3 4 1 8 4 2 1 //	AC		C	Carbon resistor (RDMF14-FX 220ΩJ) [R753,837,841]
123	0 F T 2 3 4 1 8 2 3 5 //	AC		C	Carbon resistor (RDMF14-FX 6.8ΩJ) [R809]
124	0 F T 2 3 4 1 9 4 2 8 //	AC		C	Carbon resistor (RDF14-FB 1.2KΩJ) [R851]
125	0 F T 2 3 4 1 9 5 4 1 //	AC		C	Carbon resistor (RDF14-FB 10KΩJ) [R859,902]
126	0 F T 2 3 4 1 8 4 5 6 //	AC		C	Carbon resistor (RDMF14-FX 330ΩJ) [R848]
127	0 F T 2 3 6 0 7 2 5 9 //	AE		C	Ferrite beads (BL02RN1-R62) [FB702]
128	0 F T 2 3 4 1 8 6 6 9 //	AC		C	Carbon resistor (RDMF14-FX 0ΩJ) [R706,778,831,853,868,869,871,873]

## 54 DC Power supply PWB..200V series(and 100V series except AR-405,505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
129	0 F T 2 3 4 1 8 6 1 8 //	AC		C	Carbon resistor (RDMF14-FX 4.7K $\Omega$ J) [R780,827,829,866,870]
130	0 F T 2 3 4 1 8 5 3 7 //	AC		C	Carbon resistor (RDMF14-FX 1.5K $\Omega$ J) [R874]
131	0 F T 2 3 1 0 5 4 2 3 //	AE		C	Connector (RT-01N-2.3A) [TB701,702]
132	0 F T 2 3 4 3 7 5 8 2 //	AD		C	Ferrite bead (BL02RN2-R62) [FB709]
133	0 F T 3 3 3 3 0 8 6 3 //	AP		C	Fin (APH44100-202) [4]
134	0 F T 2 3 3 2 4 0 5 2 //	AD		C	Connector (LLM-41T-1.3E) [CN701*]
135	0 F T 3 3 3 7 2 5 8 2 //	AX		C	Insulator sheet (APG27100-025) [5]
136	0 F T 3 3 3 2 2 0 9 7 //	AU		C	Connector (B34B-XADSS-F) [CN702]
137	0 F T 3 3 3 2 2 0 8 9 //	AU		C	Connector (B30B-XADSS-F) [CN703]
138	0 F T 3 3 3 2 2 0 7 0 //	AU		C	Connector (B26B-XADSS-F) [CN704]
139	0 F T 2 3 3 3 9 4 2 4 //	AQ		C	Angle (EGC-20E) [8]
140	0 F T 2 3 5 9 9 1 3 2 //	AK		C	Tube (45T-DIA13.5-30) [9]
141	0 F T 3 3 3 7 3 9 1 0 //	BC		C	Chassis (APA24000-056) [1]
142	0 F T 3 3 3 8 0 9 2 5 //	AU		C	Fin (APH34200-302) [2]
143	0 F T 2 3 5 2 3 3 1 4 //	AR		C	Sheet (AP47100-340-17) [14]
144	0 F T 3 3 3 7 3 9 0 2 //	AP		C	Fin (APH34200-303) [3]
145	0 F T 2 3 5 2 3 1 6 0 //	AR		C	Sheet (AP47100-340-05) [15]
146	0 F T 2 3 3 3 9 5 2 1 //	AR		C	Angle (AP47101-005-03) [6]
147	0 F T 2 3 4 2 3 8 1 6 //	AC		C	Screw (3 $\times$ 8) [51]
148	0 F T 2 3 3 3 9 7 5 0 //	AC		C	Angle (AP47101-008-05) [7]
149	0 F T 2 3 4 3 2 9 6 3 //	AC		C	Screw (3 $\times$ 10) [52]
150	0 F T 2 3 4 5 3 8 4 7 //	AC		C	Screw (3 $\times$ 12) [55]
151	0 F T 2 3 2 4 7 1 5 5 //	AG		C	Spacer (AP47039-946-03) [16]
152	0 F T 2 3 4 5 5 7 3 4 //	AC		C	Screw (3 $\times$ 18) [53]
153	0 F T 2 3 4 5 5 9 6 3 //	AC		C	Screw (3 $\times$ 8) [54]
154	0 F T 3 3 0 5 5 2 5 0 //	AG		C	Terminal (00438 JIS C1100R-1/4H SNPB) [13]
201	0 F T 2 3 0 8 7 7 4 3 //	AD		C	Film capacitor (AMZF-472K50) (200V series) [C720]
202	0 F T 2 3 7 7 9 5 2 1 //	AP		A	Fuse (218.160 AC250V 0.16A)(200V series) [F705]
203	0 F T 2 3 7 2 3 1 1 9 //	AL		A	Fuse (FBT5 AC125V 5A)(100V series,except AR-405,505) [F701]
204	0 F T 2 3 7 8 0 3 4 1 //	AK		A	Fuse (50CT063H)(200V series) [F700,709]
205	0 F T 3 3 1 4 7 3 3 3 //	AP		A	Fuse (50CT050H)(200V series) [F701]
206	0 F T 2 3 7 7 9 5 5 6 //	AP		A	Fuse (AC125V 0.16A)(100V series,except AR-405,505) [F705]
207	0 F T 3 3 0 8 0 0 2 6 //	AP		A	Fuse (50CT032H)(200V series) [F702,703,704,706,707,708]
208	0 F T 2 3 7 6 1 1 1 8 //	AP		A	Fuse (FBT3)(100V series,except AR-405,505) [F702,703,704,706,707,708]
209	0 F T 2 3 7 2 3 1 2 7 //	AK		A	Fuse (FBT6.3 AC125V 6.3A)(100V series,except AR-405,505) [F709]
210	0 F T 3 3 1 1 4 6 1 3 //	AP		A	Fuse (65TS 150L)(100V series,except AR-405,505) [F700]
211	0 F T 2 3 0 4 3 3 9 8 //	AF		C	Fuse holder (F-107)(100V series,except AR-405,505) [for F700]
212	0 F T 2 3 5 5 4 0 2 //	AD		C	Fuse holder (EYF-52LCZ)(200V series) [F700*]
213	0 F T 3 1 5 4 3 1 9 3 //	AU		B	Transformer (EXT42940-686)(200V series) [T701]
214	0 F T 2 3 7 7 6 5 2 2 //	BC		C	Reactor (ADR-25-05-080S)(200V series) [L701]
215	0 F T 3 3 0 0 6 0 0 4 //	AU		C	Reactor (SC-05-300)(200V series) [L702]
216	0 F T 2 3 5 5 4 0 2 //	AD		C	Fuse holder (EYF-52LCZ)(100V series,except AR-405,505) [F702-709*]
217	0 F T 3 1 5 4 5 6 9 2 //	AU		B	Transformer (EXT42920-555A)(100V series,except AR-405,505) [T701]
218	0 F T 2 3 7 0 3 0 2 9 //	AT		C	Reactor (FK-120G-2520)(100V series,except AR-405,505) [L701,702]
219	0 F T 2 3 5 8 6 9 2 8 //	AD		B	Diode (S5688J) [D701~705]
219	0 F T 2 3 5 8 6 9 2 8 //	AD		B	Diode (S5688J)(200V series) [D701~705]
220	0 F T 2 3 2 4 5 6 0 8 //	AK		B	Diode (RG1C)(200V series) [D708]
221	0 F T 2 3 6 0 6 7 3 2 //	AD		B	Diode (S5688G)(100V series,except AR-405,505) [D701~705]
222	0 F T 2 3 2 8 5 7 5 8 //	AK		B	Diode (RG2A)(100V series,except AR-405,505) [D708]
223	0 F T 2 3 4 2 9 7 8 4 //	AU		B	Rectifier (ESAD92M02)(200V series) [RC703]
224	0 F T 3 3 1 0 5 3 4 7 //	AS		B	Traiac (TMG16C60F)(200V series) [CR701]
225	0 F T 2 3 4 1 3 4 0 3 //	AU		B	Rectifier (ESAD92M-03)(100V series,except AR-405,505) [RC703]
226	0 F T 2 3 6 5 2 1 0 6 //	AU		B	Traiac (SM25GZ51)(100V series,except AR-405,505) [CR701]
227	0 F T 3 3 0 9 2 0 9 1 //	BB		B	FET (2SK2078)(200V series) [Q702,703,704]
228	0 F T 3 3 2 0 1 4 4 3 //	BB		B	FET (2SK2057)(100V series,except AR-405,505) [Q702,703,704]
229	0 F T 3 3 3 7 7 1 1 8 //	BA		C	Chemical capacitor (KMM400VNSN-270M-30C)(200V series) [C714,715,716]
230	0 F T 2 3 2 4 3 6 2 1 //	AG		C	Chemical capacitor (KME35VB-47FC) (200V series) [C725]
231	0 F T 2 3 2 3 9 8 3 7 //	AK		C	Chemical capacitor (KME35VB-100FC)(100V series,except AR-405,505) [C725]
232	0 F T 3 3 3 7 5 0 7 7 //	BA		C	Chemical capacitor (KMM200VNSN-1200M-35C)(100V series,except AR-405,505) [C714,715]
233	0 F T 3 3 2 8 3 7 1 7 //	BA		C	Chemical capacitor (KMM200VNSN-1000M-35B)(100V series,except AR-405,505) [C716]
234	0 F T 2 3 6 3 3 0 1 2 //	AH		C	Film capacitor (MMC-473K630)(200V series) [C723]
235	0 F T 2 3 0 9 0 2 8 0 //	AD		C	Film capacitor (AMZF-103K50)(100V series,except AR-405,505) [C720]
236	0 F T 2 3 0 9 0 2 8 0 //	AD		C	Film capacitor (AMZF-103K50)(100V series,except AR-405,505) [C854]
237	0 F T 2 3 5 1 5 1 4 1 //	AE		C	Ceramic capacitor (DE0705-742R221K2K)(200V series) [C717,718]
238	0 F T 2 3 6 1 1 3 2 9 //	AK		C	Film capacitor (MMC-104K400)(100V series,except AR-405,505) [C723]
239	0 F T 2 3 3 8 2 0 7 9 //	AG		C	Film capacitor (MMT-224J50)(100V series,except AR-405,505) [C853]
240	0 F T 2 3 5 1 5 1 0 9 //	AE		C	Ceramic capacitor (DE0705-742R471K1K)(100V series,except AR-405,505) [C717,718]
241	0 F T 2 3 6 4 4 6 2 6 //	AG		B	Variable resistor (EVM-4LGA00B52)(200V series) [RV701]
242	0 F T 2 3 4 7 6 4 4 8 //	AK		B	Cement resistor (BPR56 5W 0.22 $\Omega$ J)(200V series) [R728,729]
243	0 F T 2 3 7 4 0 2 7 7 //	AK		B	Variable resistor (EVM-4LGA00B12)(100V series,except AR-405,505) [RV701]
244	0 F T 2 3 3 8 1 1 5 8 //	AK		B	Cement resistor (BPR26 2W 0.01 $\Omega$ K)(200V series) [R816]
245	0 F T 2 3 3 7 1 3 4 4 //	AK		B	Cement resistor (BPR56 5W 0.1 $\Omega$ K)(200V series) [R901]
246	0 F T 3 3 0 7 9 2 1 4 //	AD		C	Metal film resistor (RSMF1RB 47K $\Omega$ J)(200V series) [R702,723]
247	0 F T 2 3 3 7 7 1 1 3 //	AD		C	Metal film capacitor (RSMF2RB 22K $\Omega$ J)(200V series) [R703,704]
248	0 F T 2 3 3 4 3 2 4 3 //	AK		B	Cement resistor (MEG05N150JU145 5W 15 $\Omega$ J)(100V series,except AR-405,505) [R713,714,715,716]

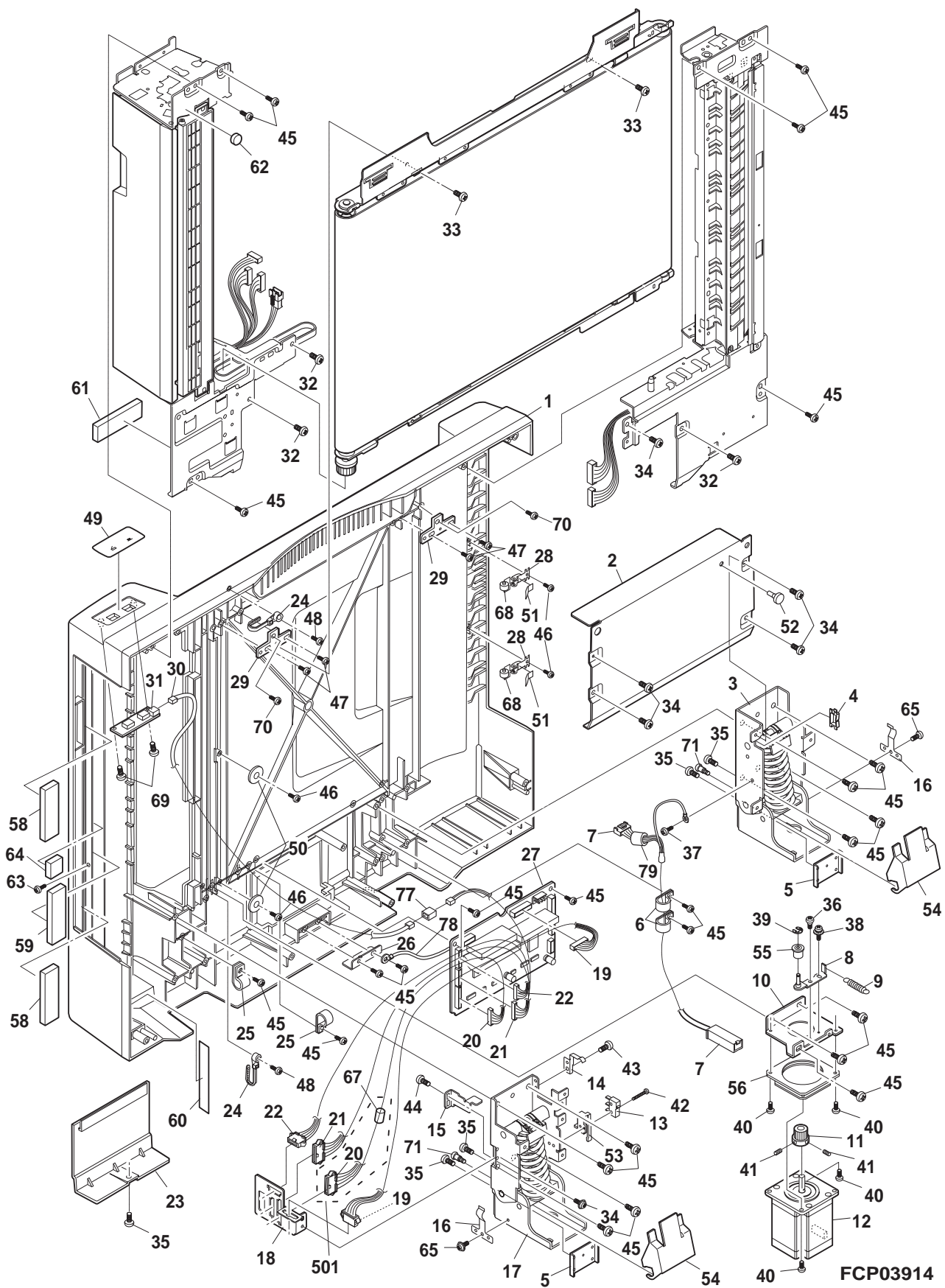
54 DC Power supply PWB..200V series(and 100V series except AR-405,505)

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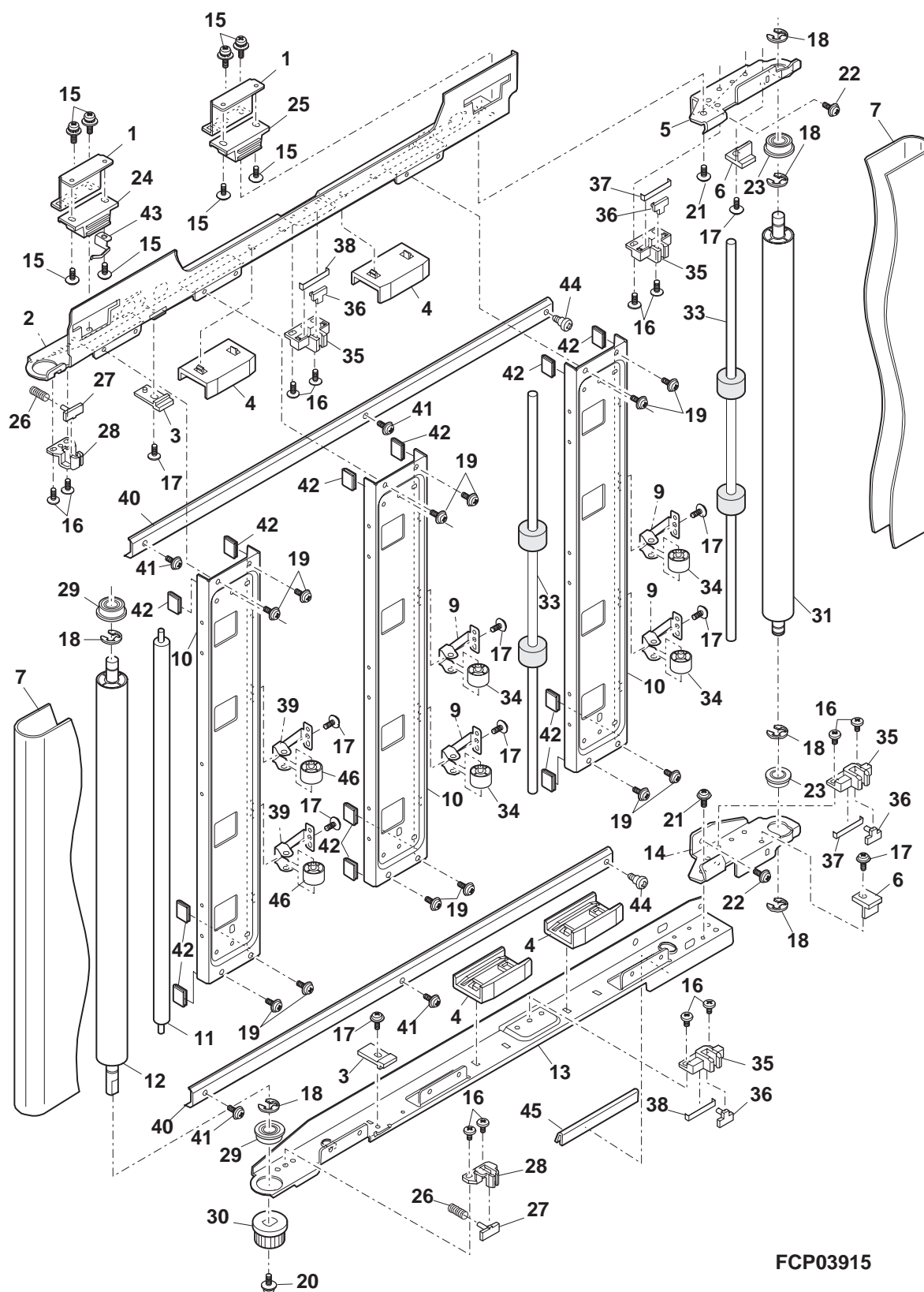


# 55 RADF Exteriors(for AR-405)



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# 56 RADF Transport belt section(for AR-405)



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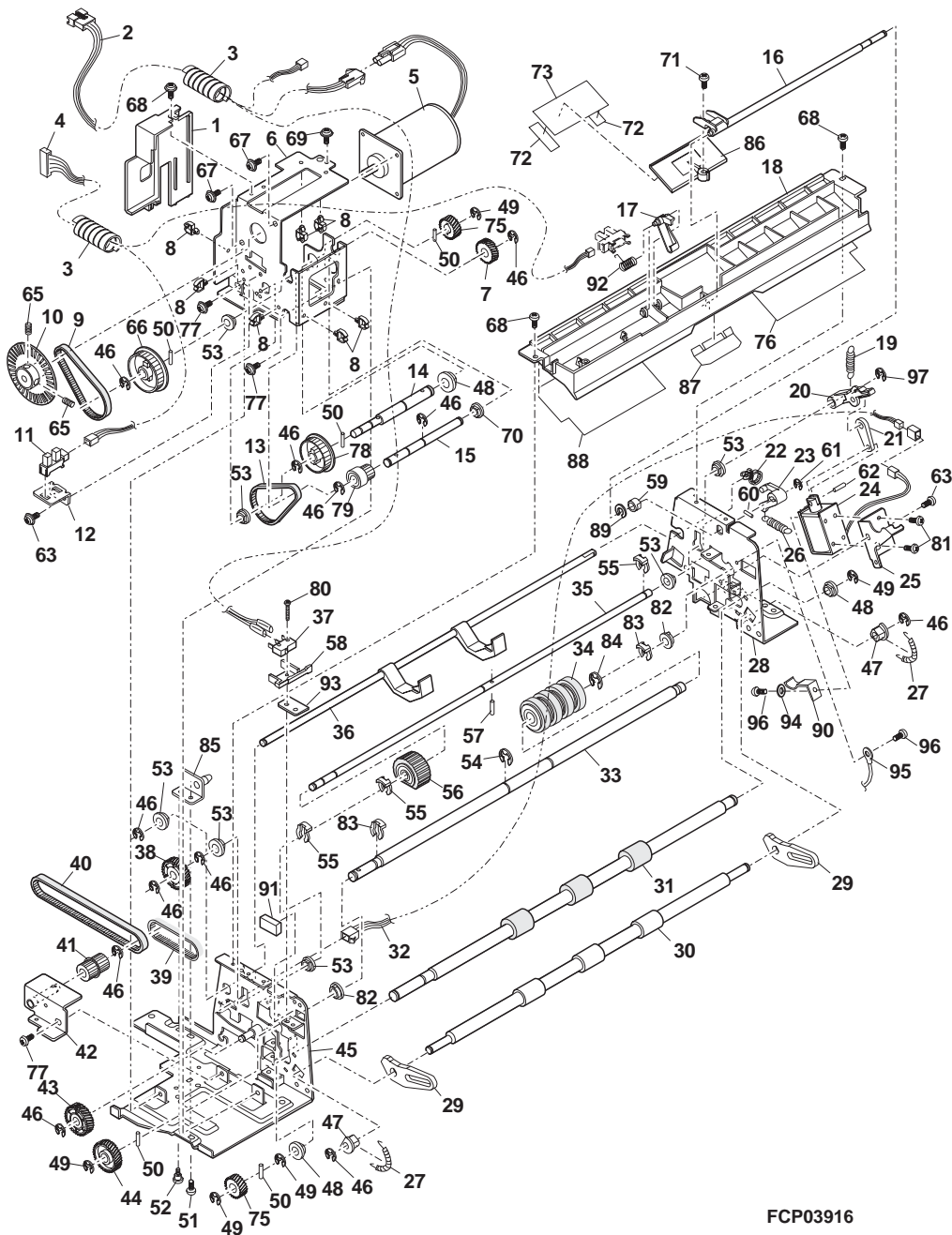
## 57 RADF Paper feeding transport section 1(for AR-405)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0CW2214P037//	AH		C	Harness guide
2	0CW2214K209//	AR		C	ASM-drive F harness
3	0CW2214P405//	AD		C	SP tube 1
4	0CW2214K204//	AH		C	ASM-sensor 1 harness
5	0CW2234P401//	BM		B	Motor (MOT-NA4565B02)
6	0CW2214P108//	AT		C	PF motor bracket
7	0CW2214P316//	AS		C	Gear (GER-0.75-24H-0W)
8	0CWE450000897	AC		C	Clamp (UAMS-05SN-W)
9	0CW2214P341//	AP		C	Belt (BLT-S2M166-6)
10	0CW2214P340//	AV		C	Clock pulley (PLY-S2M-20)
11	0CWE314000531	AN		B	Photo interrupter (TLP1225(C5))
12	0CW2214P109//	AE		C	PF sensor bracket
13	0CW2214P319//	AP		B	Belt (BLT-S2M138-6)
14	0CW2214P206//	AP		C	Shaft 2
15	0CW2214P205//	AK		C	Shaft 1
16	0CW2214P019//	AP		C	Weight lever shaft
17	0CW2214P020//	AE		C	Lever
18	0CW2214P007//	AT		C	Guide
19	0CW2214P314//	AD		C	Shutter spring
20	0CW2214P023B/	AE		C	Lever
21	0CW2214P036//	AE		C	Shutter link
22	0CWE450000871	AB		C	Snap band (SG-110)
23	0CW2214P021//	AE		C	Weight lever
24	0CW2214P403//	AY		B	Solenoid (SOL-TDS-10SL-102)
25	0CW2214P101//	AE		C	S solenoid bracket
26	0CW2214P313//	AD		C	Weight spring
27	0CW2214P312//	AD		C	Resist spring
28	0CW2214P104F/	AR		C	A side plate F
29	0CW2214P022//	AE		C	Resist link
30	0CW2214P302//	AX		C	Resist pinch roller
31	0CW2214P301//	BB		C	Resist roller
32	0CW2214K216//	AH		C	ASM-SOL harness
33	0CW2214P200//	AZ		C	Shaft
34	0CW2214P339//	BA		C	Roller
35	0CW2214P201//	AV		C	Pick up shaft
36	0CW2214P300D/	AU		C	Shutter
37	0CWE120000870	AM		B	Microswitch (SS-5T)
38	0CW2214P317//	AS		C	Gear (GER-0.75-32H-0W)
39	0CW2214P318//	AR		B	Belt (BLT-B100-S2M120)
40	0CW2214P320//	AQ		B	Belt (BLT-B60-S2M248)
41	0CW2214P031//	AF		C	Pulley (PLY-S2M-24)
42	0CW2214K033//	AL		C	Idler bracket ass'y
43	0CW2214P342//	AS		C	Gear (GER-0.75-H-0W)
44	0CW2214P032//	AF		C	Gear (GER-0.75-32H)
45	0CW2214K027E/	AX		C	A side plate R ass'y
46	XRESP50-06000	AA		C	E type ring
47	0CW6903811111	AE		C	Bearing MF
48	0CW3193001111	AD		B	Bearing (8MM)
49	XRESP70-08000	AA		C	E type ring
50	0CWHP020120SC	AC		C	Pin (φ2-12)
51	0CW1001P441//	AG		C	Bolt (3×6)(BOT-SW-HW CAP)
52	0CW2078P023B/	AC		C	Screw (M3)
53	0CW2158P521B/	AE		C	Bearing 6
54	XRESP80-09000	AA		C	E type ring
55	0CW2166P034B/	AC		C	Clip-5
56	0CW2214P471//	AQ		C	Semicircular roller SHP
57	0CWHP020140SC	AC		C	Pin (φ2-14)
58	0CW2158P003D/	AF		C	Switch lever
59	0CW3384321111	AC		B	Bearing 4
60	0CWHP020060SC	AC		C	Pin (φ2-6)
61	XRESP30-05000	AA		C	E type ring
62	0CWSP030100FP	AC		C	Spring pin (φ3×10)
63	0CW030060FZTP	AA		C	Screw (3×6)
65	0CW030080FPWP	AB		C	Screw (3×8)
66	0CW2198P003//	AH		C	Pulley (PLY-S2M-56)
67	0CW030060FZiT	AA		C	Screw (3×6)
68	0CW4016P167//	AC		C	Screw (SCR030050)
69	0CW2158P377//	AB		C	Screw (3×4)
70	0CW3384221111	AB		B	Bearing 6
71	0CW030080FZWS	AA		C	Screw (3×8)
72	0CW2214P469//	AE		C	PWR sheet 2
73	0CW2214P456B/	AG		C	PWR sheet
75	0CW2168P029//	AF		C	Gear (GER-0.75-21H-L)
76	0CW2214P491//	AH		C	Curl sheet F-K
77	0CW040060FZBP	AB		C	Screw (4×6)
78	0CW2168P030//	AG		C	Pulley (PLY-S2M-50)
79	0CW2142P037//	AS		C	Pulley (PLY18 O/W G373)
80	0CW023140FBWS	AC		C	Screw (2.3×14)
81	0CW030030FZiT	AB		C	Screw (3×3)
82	0CW2078P652//	AE		C	Bearing 8

# 57 RADF Paper feeding transport section 1(for AR-405)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
83	0CW2088P034//	AK		C	Stopper 6
84	0CW2095P310//	AD		C	Stopper 8
85	0CW2214K101//	AL		C	DF support plate ass'y
86	0CW2234P008//	AG		C	Weight
87	0CW2214P524//	AG		C	Weight sheet
88	0CW2214P492//	AH		C	Curl sheet R-K
89	0CW2129P188//	AD		C	Crip (CLIP 3)
90	0CW2223P101//	AD		C	A earth spring
91	0CW2214P531//	AC		C	Spacer
92	0CW2234P301//	AF		C	Lever spring
93	0CW2214P528//	AC		C	MSW sheet
94	0CWHW030FZM//	AA		C	Washer
95	0CW2198K239//	AG		C	ASM earth wire 2
96	0CW030030FNiT	AB		C	Screw (3x3)
97	XRESP40-06000	AA		C	E type ring

# 57 RADF Paper feeding transport section 1(for AR-405)

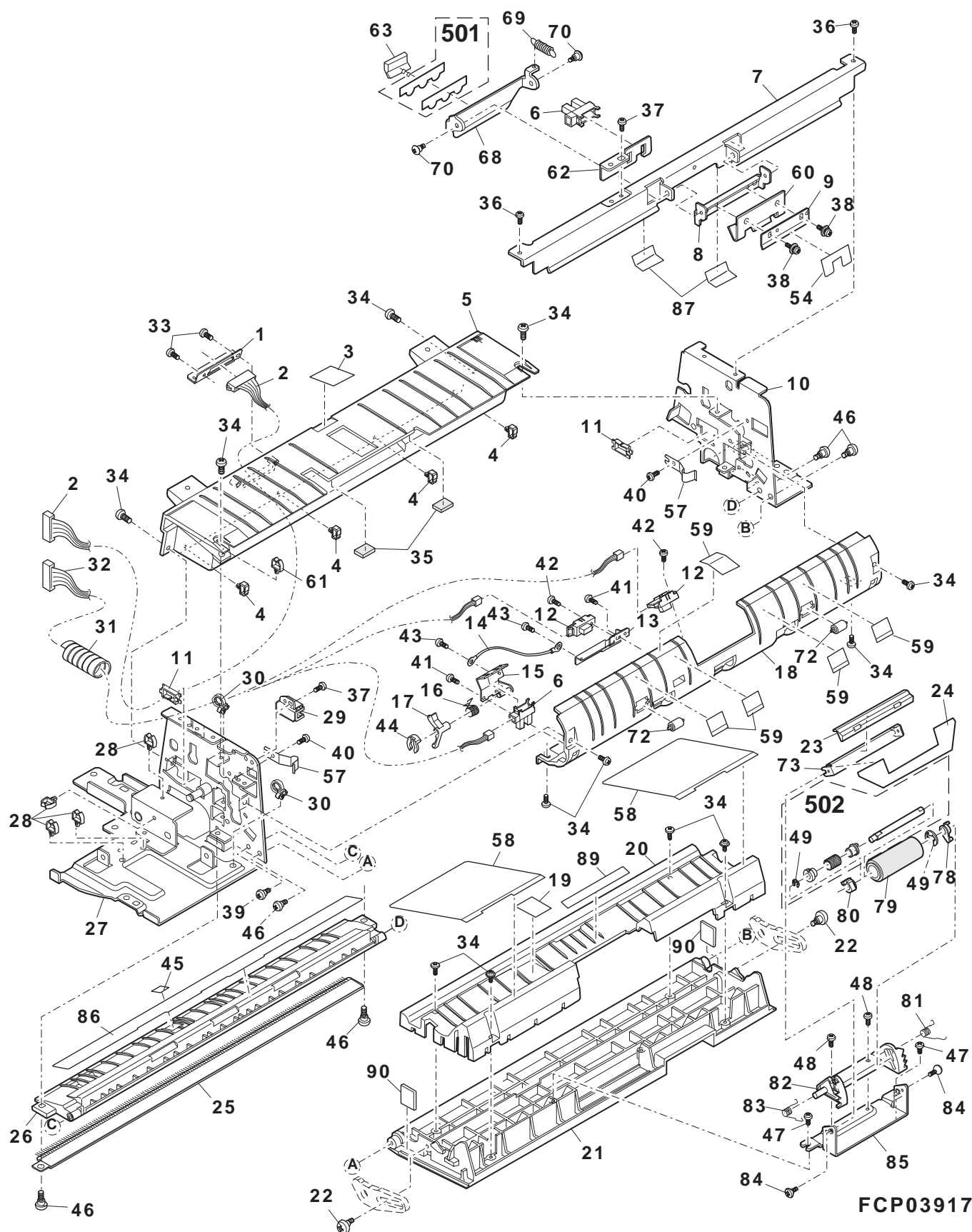


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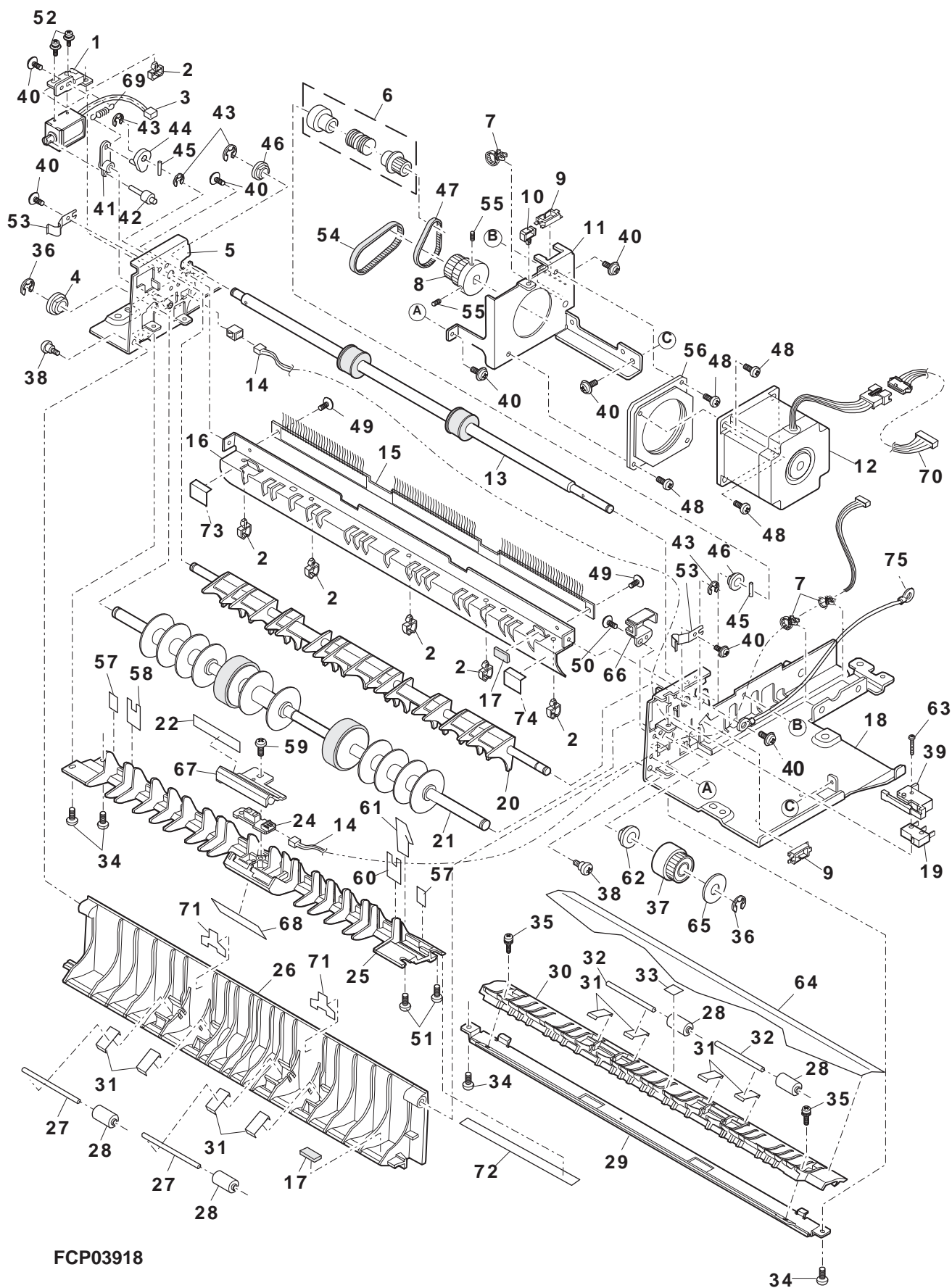
# 58 RADF Paper feeding transport section 2(for AR-405)





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# 59 RADF Reversion transport section(for AR-405)

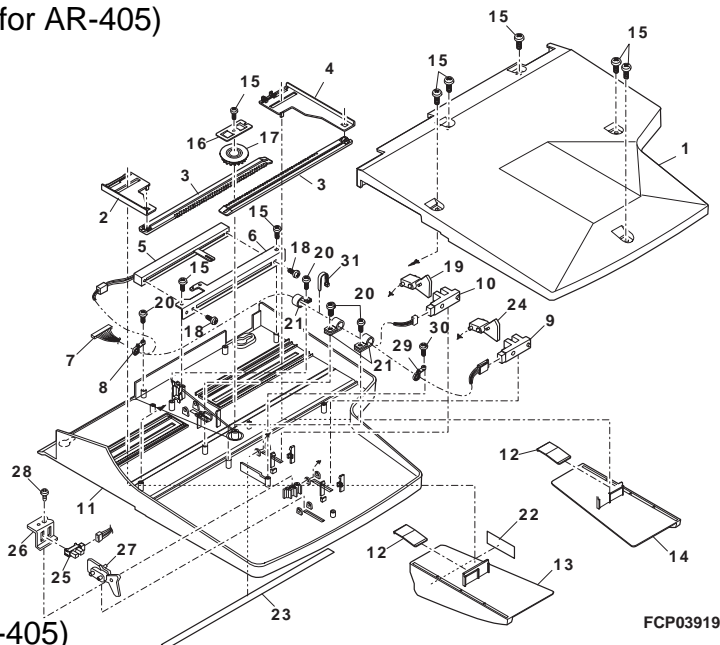


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## 60 RADF Paper feedig tray section(for AR-405)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0CW2214P065//	AZ		C	Tray cover
2	0CW2214P005//	AG		C	Slide holder R
3	0CW2214P004//	AF		C	Tray rack
4	0CW2214P039//	AG		C	Slide holder F
5	0CW2223K214//	AX		C	ARM-VR harness
6	0CW2214P128//	AK		C	Slide switch bracket
7	0CW2234K202//	AT		C	ASM-TRAY 2234 harness (Inch series·Except U.S.A.,CANADA)
	0CW2214K202E//	AS		C	ASM-TRAY harness (Other countries)
8	0CWE450000368	AD		C	Clamp (T18MR)
9	0CWE314000120	AM		B	Proto interrupter (GP1A25LC)(Except Europe)
10	0CWE314000120	AM		B	Photo interrupter (GP1A25LC)
11	0CW2214P066//	BA		D	Original tray
12	0CW2214P129//	AF		C	Tray guide plate spring
13	0CW2214P059//	AK		C	Tray guide R
14	0CW2214P060//	AK		C	Tray guide F
15	0CW030080FZBB	AB		C	Screw (3×8)
16	0CW2199P117//	AE		C	Tray plate spring
17	0CW2142P180//	AE		C	Tray gear 22
18	0CW030060FNBI	AA		C	Screw (3×6)
19	0CW2214P070//	AH		C	Tray sensor lever
20	0CW030100FBBB	AB		C	Screw (3×10)
21	0CWE450000067	AC		C	Wire clamp (NK-2N)
22	0CW2214P541//	AD		C	Indication label
	0CW2214P542//	AR		D	Tray scale (AB series·For Europe)
23	0CW2214P544//	AN		D	Tray scale (Inch series)
	0CW2214P546//	AV		D	Tray scale (AB series·Except Europe)
24	0CW2214P070//	AH		C	Tray sensor lever (Except Europe)
25	0CWE314000531	AN		B	Photo interrupter (TLP1225(C5))(Inch series·Except U.S.A.,CANADA)
26	0CW4054P074B/	AF		C	R-T sensor bracket (Inch series·Except U.S.A.,CANADA)
27	0CW2235P039//	AG		C	Tray sensor lever (Inch series·Except U.S.A.,CANADA)
28	0CW030080FZBB	AB		C	Screw (3×8)(Inch series·Except U.S.A.,CANADA)
29	0CWE450000368	AD		C	Clamp (T18MR)(Inch series·Except U.S.A.,CANADA)
30	0CW030100FBBB	AB		C	Screw (3×10)(Inch series·Except U.S.A.,CANADA)
31	0CWE450000005	AA		C	Tight band (SKB-1N)(Europe)

## 60 RADF Paper feedig tray section(for AR-405)



## 61 RADF PBA-Control PWB(for AR-405)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0CWE73423M106	AC		C	Capacitor (CESEM1E100-F) [C10,C11]
2	0CWE73497Z104	AA		C	Capacitor (GRM39F104Z25PT) [C35~C39,C42~C44,C46,C47,C49,C50]
3	0CWE73268J101	AF		C	Capacitor (GRM40CH101J50PT) [C32,C33]
4	0CWE73303Z105	AD		C	Capacitor (GRM40F105Z16PT) [C41,C45,C48,C51,C52,C59~C62]
5	0CWE73431M107	AF		C	Capacitor (CEEFM1H101M5-F) [C53,C54]
6	0CWE73423M476	AC		C	Capacitor (CESEM1C470M-F) [C55]
7	0CWE73423M475	AC		C	Capacitor (CESEM1H47-F) [C57]
8	0CWE73303Z224	AC		C	Capacitor (GRM40F224Z50PT) [C56]
9	0CWE74212WE06	AE		C	Connector (DF1B-6P-25DSA) [CN4]
10	0CWE74212WE08	AE		C	Connector (DF1B-8P-2.5DSA) [CN7]
11	0CWE74212WE09	AE		C	Connector (DF1B-9P-25DSA) [CN5]
12	0CWE323000343	AD		B	IC (M93C46MN6) [IC3]
13	0CWE321000645	BB		B	IC (STK6713BMK4) [IC8]
14	0CWE321000644	AZ		B	IC (STK6712BMK4) [IC12]
15	0CWE312001362	AC		B	Transistor (FN1L3M) [Q12]
16	0CWE312001293	AR		B	Transistor (2SJ265) [Q13]

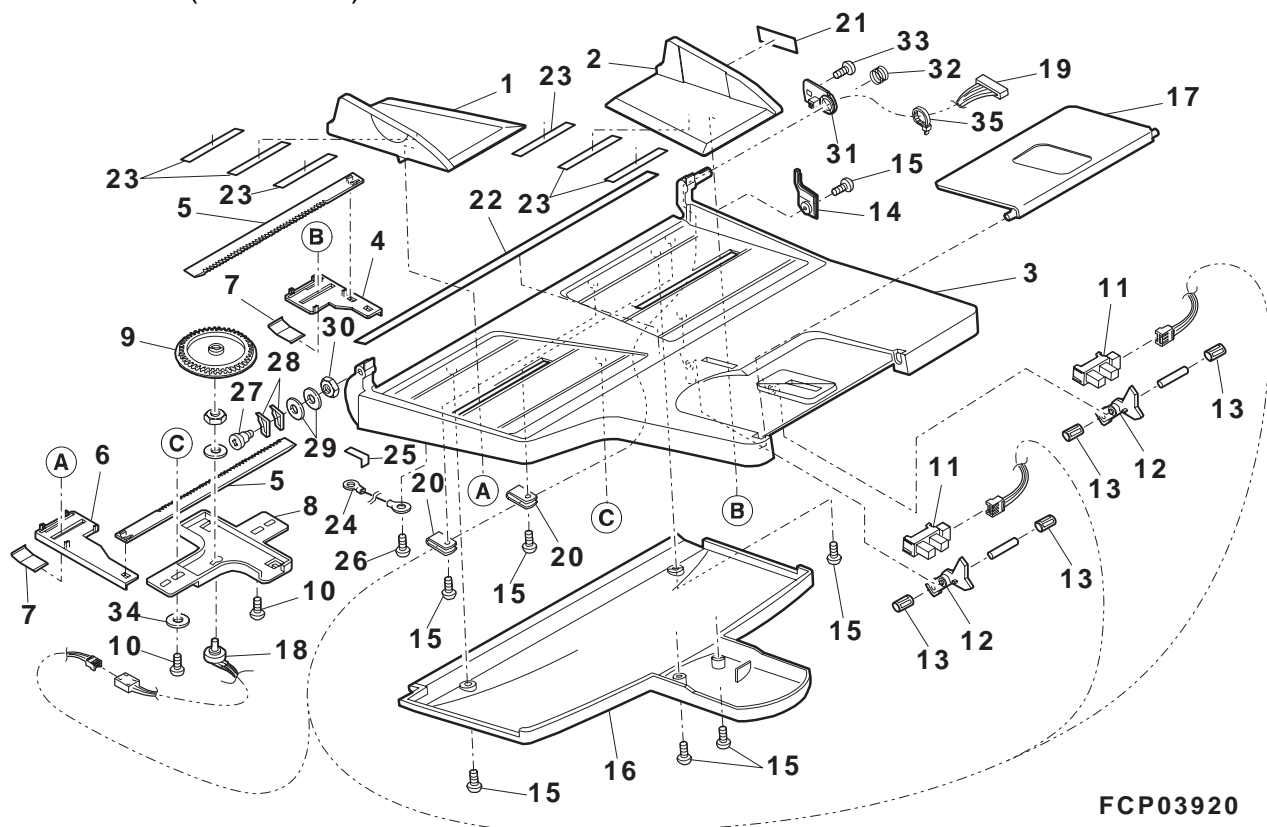
## 61 RADF PBA-Control PWB(for AR-405)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
17	0CWE312001368	AK		B	FET (2SK1282-Z) [Q15]
18	0CWE312001310	AC		B	Transistor (FA1L3M) [Q17]
19	0CWE70162J101	AA		C	Resistor (CRG8SG101J) [R93,R94]
20	0CWE70162J181	AA		C	Resistor (CRG8SG181J) [R100,R101]
21	0CWE70188J203	AA		C	Resistor (CRG10G203J) [R105]
22	0CWE70162J202	AA		C	Resistor (CRG8SG202J) [R106]
23	0CWE70162J100	AA		C	Resistor (CRG8SG100J) [R118]
24	0CWE70188J154	AA		C	Resistor (CRG10G154J) [R47]
25	0CWE70213JR39	AC		C	Resistor (RSSX1U039J) [R97~R99]
26	0CWE70188F751	AA		C	Resistor (CRG10G751F) [R67]
27	0CWE70162J472	AA		C	Resistor (CRG8SG472J) [R25]
28	0CWE70205J222	AC		C	Resistor (CRG2G222J) [R107]
29	0CWE70188F243	AA		C	Resistor (CRG10G243F) [R39]
30	0CWE70188F683	AA		C	Resistor (CRG10G683F) [R112,R113]
31	0CWE70188F912	AA		C	Resistor (CRG10G912F) [R114]
32	0CWE70188F153	AA		C	Resistor (CRG10G153F) [R116]
33	0CWE420001011	AC		C	Test pin (LC-3-SBK) [TP2]
34	0CWE76008H160	AD		B	Zener diode (RD16MB2) [ZD3]
35	0CWE76008G180	AD		B	Zener diode (RD18MB1) [ZD5,ZD6,ZD7]
36	0CWE73425M107	AD		C	Capacitor (CEDSM1H101M-F) [C1]
37	0CWE73495K102	AB		C	Capacitor (GRM39B102K50PT) [C2~C7]
38	0CWE73303Z334	AC		C	Capacitor (GRM40F344Z25PT) [C9]
39	0CWE73495K103	AB		C	Capacitor (GRM39B103K50PT) [C12,C13,C16~C18,C21~C23]
41	0CWE73303Z104	AB		C	Capacitor (GRM40F104Z25PT) [C14,C15,C19,C20,C25,C26,C28~C30]
42	0CWE73425M476	AC		C	Capacitor (CEDSM1H470M-F) [C31,C40]
43	0CWE73423M105	AC		C	Capacitor (DESEM1H010-F) [C34]
44	0CWE74299BK06	AB		C	Connector (DF3-6P-2DSA) [CN9]
46	0CWE74071WE04	AC		C	Connector (B4P-VH)(4pin) [CN6]
50	0CWE311000978	AD		B	Diode (SB02-03Q) [D1,D3,D4]
51	0CWE311000977	AB		B	Diode (DSA010) [D6]
52	0CWE311001020	AE		B	Diode (SS14) [D7,D8]
53	0CWE311001019	AD		B	Diode (S1G-G11) [D2,D9]
54	0CWE77002373A	AL		B	IC (TC74HC373AF) [IC1]
55	0CWE74269BK28	AD		C	IC socket (2-641605-3) [for IC12]
56	0CWE7700214A/	AG		B	IC (TC74HC14AF) [IC4]
57	0CWE7702006//	AG		B	IC (HD74LS06PF) [IC5]
58	0CWE321000320	AK		B	IC (M51953BFP) [IC6]
59	0CW2198P422A/	AY		B	LSI (LSI-LC93043A-V54) [IC7]
60	0CWE321000358	AG		B	IC (UPC339G2) [IC9]
61	0CWE321000650	BB		B	IC (STK681-050) [IC10]
62	0CWE323000280	BC		B	IC (uPD78233GC-3B9) [IC11]
63	0CWE321000591	AF		B	IC (uPC358G2) [IC13,IC14]
64	0CWE230000031	AK		C	Coil (SK-8MS-5Y) [L1,L2]
65	0CWE314000337	AB		B	LED (GL3PR8) [LED1]
66	0CWE250000107	AX		B	Crystal (CST9.83MTW) [OSC1]
67	0CWE250000141	AG		B	Ceramic resonator (CST5.0MGW040) [OSC2]
68	0CWE120000897	AD		B	Push switch (SKHHPK) [PSW1]
69	0CWE312001240	AC		B	Transistor (FN1L3N) [Q1,Q2]
70	0CWE312000082	AC		B	Transistor (2SC2712) [Q3~Q5]
71	0CWE312001081	AB		B	Transistor (FA1L3N) [Q7~Q11]
72	0CWE312001363	AG		B	FET (2SK1726) [Q14]
73	0CWE70188J223	AA		C	Resistor (CRG10GJ223J) [R1~R5,R78,R79]
74	0CWE70228J103	AA		C	Resistor (RK73K1JTD 10KΩ J) [R6~R24]
	0CWE70228J103	AA		C	Resistor (RK73K1JTD 10KΩ J) [R26~R28,R30,R32~R38]
	0CWE70228J103	AA		C	Resistor (RK73K1JTD 10KΩ J) [R40~R43,R64,R69,R70,R75,R86]
	0CWE70228J103	AA		C	Resistor (RK73K1JTD 10KΩ J) [R87,R96,R102~R104,R109~R111,R117]
75	0CWE70188J104	AA		C	Resistor (CRG10G104J) [R45,R46,R48,R49]
76	0CWE70188J100	AA		C	Resistor (CRG10G100J) [R50]
77	0CWE70228J472	AA		C	Resistor (RK73K1JTD4.7KΩJ) [R31,R51~R62,R65,R68]
	0CWE70228J472	AA		C	Resistor (RK73K1JTD4.7KΩJ) [R71~R73,R76,R77]
78	0CWE70188J102	AA		C	Resistor (CRG10G102J) [R82,R83,R88]
79	0CWE70188J105	AA		C	Resistor (CRG10G105J) [R90]
80	0CWE70188J821	AA		C	Resistor (CRG10G821J) [R91]
81	0CWE70197J4R7	AA		C	Resistor (ERD25FAJ4R7) [R44,R92]
82	0CWE70188J202	AA		C	Resistor (CRG10G202J) [R80,R81]
83	0CWE70188J153	AA		C	Resistor (CRG10G153J) [R29,R115]
84	0CWE70188J152	AA		C	Resistor (CRG10G152J) [R63,R89]
85	0CWE70188J302	AA		C	Resistor (CRG10G302J) [R74,R95]
86	0CWE70205J332	AA		C	Resistor (CRG2G332J) [R108]
87	0CWE70188J222	AA		C	Resistor (CRG10GJ222T) [R84]
89	0CWE120000368	AR		B	Dip switch (KSD05) [SW1]
90	0CWE76005A6R2	AE		B	Zener diode (RD6.2FB) [ZD1]
91	0CWE76008H120	AB		B	Zener diode (RD12MB2) [ZD2]
97	0CW2234K213//	AY		B	EP ROM ass'y -NMI [IC2]
98	0CWE70014J101	AB		C	Resistor (RD25S 100ΩJ)
99	0CWE70188J912	AA		C	Resistor (CRG10G912J) [R66]
100	0CWE73425M477	AD		C	Capacitor CEDSM1A471M-F [C58]
101	0CWE120001516	AF		B	IC protector (ICP-N25) [ICP1]
102	0CWE321000540	AW		B	IC (SI-8201L) [IC15]
	(Unit)				
901	0CW2234K217//	CA		E	PBA control PWB

## 62 RSPF unit 1(for AR-505)

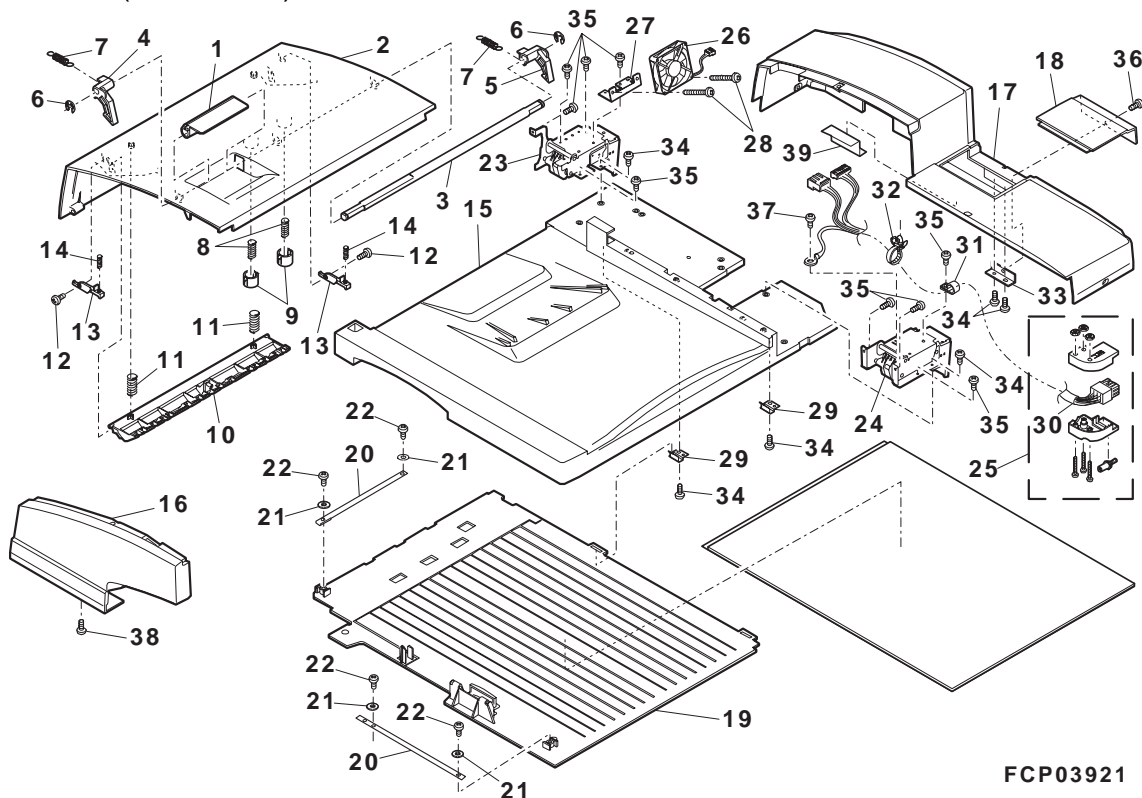
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0CW2254P040//	AH		D	Tray guide F
2	0CW2254P041//	AH		D	Tray guide R
3	0CW2254P052//	BA		D	Original tray
4	0CW2214P005//	AG		C	Slide holder R
5	0CW2214P004//	AF		C	Tray rack
6	0CW2214P039//	AG		C	Slide holder F
7	0CW2254P143//	AF	N	C	Tray guide plate spring
8	0CW2254P038//	AF		C	RV holder
9	0CW2254P037//	AF		C	Gear
10	0CW2185P357A//	AA		C	Screw (M38)
11	0CWE314000619	AH		B	Photo sensor (TLP1241(C5))
12	0CW2235P039//	AG		C	Tray sensor lever
13	0CW2235P404//	AE		C	Knob spring
14	0CW2254P055//	AE		C	Tray rear cover
15	0CW030100FZBB	AA		C	Screw (310)
16	0CW2254P053//	AW		D	Tray lower cover
17	0CW2254P054//	AH		D	Sub tray
18	0CW2254K514//	AU		C	Harness (ASM-VR)
19	0CW2254K507//	AT		C	Harness (ASM-TR)
20	0CWE450000067	AC		C	Wire clamp (NK-2N)
21	0CW2214P541//	AD		C	Indication label
22	0CW2254P373//	AP	N	C	Tray Scale (for Japan only)
23	0CW2254P376//	AP	N	C	Tray Scale (for AB series)
24	0CW2254P378//	AP	N	C	Tray Scale (For Inch series)
25	0CW2229P329//	AC	N	C	Slide sheet
26	0CW2254P483//	AR	N	C	Wire
27	0CW2254P145//	AE	N	C	Wire stopper
28	0CW2185P357//	AA		C	Screw (M38)
29	0CW2254P339//	AD		C	Screw (M4)
30	0CW2254P364//	AC		C	Washer 6
31	0CW39914//	AC	N	C	Washer
32	0CWNT040FZ-//	AA		C	Nut
33	0CW2254P060//	AD		C	Bush
34	0CW2254P345//	AF	N	C	Stopper
35	0CW030060FZBi	AA		C	Screw
36	0CWHW030FZ//	AA	N	C	Washer (M3)
37	0CWE450000005	AA		C	Tight band (SKB-1M)

## 62 RSPF unit 1(for AR-505)



**63** RSPF unit 2(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0CW2254P049//	AG		D	Jam cover handle
2	0CW2254P021//	BD		D	Jam cover
3	0CW2254P050//	AL		C	Jam cover lever shaft
4	0CW2254P048//	AE		C	Jam cover lever F
5	0CW2254P070//	AE		C	Jam cover lever R
6	0CWER050SKP//	AA		C	E type ring 5
7	0CW2254P337//	AC		C	Jam cover spring
8	0CW2229P364//	AE		C	Resist spring
9	0CW2254P056//	AD		C	Resist spring holder
10	0CW2254P089//	AM		C	RG front guide
11	0CW2254P350//	AD		C	RG front guide spring
12	0CW2254P333//	AD		C	Screw (M3)
13	0CW2254P091//	AE		C	C Lock lever
14	0CW2254P351//	AC		C	C lock spring
15	0CW2254P043//	BH		D	Base
16	0CW2254P066//	AT		D	Front cover
17	0CW2254P061//	BB		D	Rear cover
18	0CW2214P068//	AM		D	Maintenance cover
19	0CW2254K057//	BF		C	Pressure plate 1 ass'y
20	0CW2254P354//	AK		C	Stopper
21	0CW8003P161//	AD		C	Washer
22	0CW030080FZBB	AB		C	Screw (3×8)
23	0CW2254K001//	BE		C	Hing L ass'y
24	0CW2254K002//	BD		C	Hing R ass'y
25	0CW2254K513//	BB		C	Harness (ASM-IF-CG)
26	0CW2241P601//	BC		B	Fan (FAN-2408-NL-05W-B5)
27	0CW2254P130//	AG		C	FAN Bracket
28	0CW040250FZWS	AC		C	Screw (M4×25)
29	0CW2254P128//	AD		C	Bracket
30	0CW2254K512//	BA		C	Harness (ASM-I/F)
31	0CWE450000070	AB		C	Wire clamp (NK-5N)
32	0CWE450000005	AA		C	Tight band (SKB-1M)
33	0CW2214P140//	AE		C	M plate
34	0CW040100FZBB	AB		C	Screw (4×10)
35	0CW040060FZBP	AB		C	Screw (4×6)
36	0CW040080FZBi	AA		C	Screw (M4×8)
37	0CW040060FNBi	AA		C	Screw (M4×6)
38	0CW2254P478//	AG	N	C	F spacer rubber
39	0CW2254P405//	AH	N	C	Insulation sheet

**63** RSPF unit 2(for AR-505)


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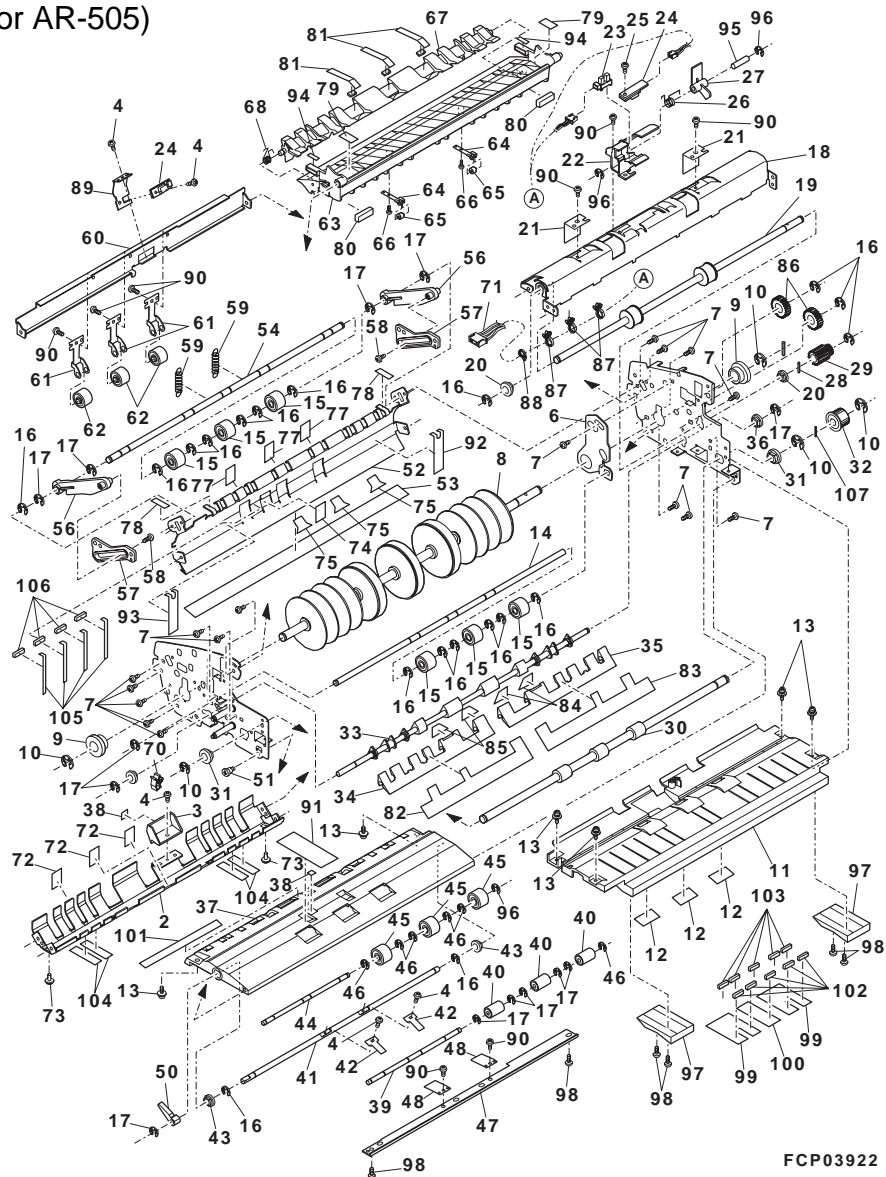
## 64 RSPF unit 3(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0CW2254K003//	AU		C	Side plate F
2	0CW2254P113//	AZ		C	W guide
3	0CW2254P090//	AE		C	Holder
4	0CW030060FZBi	AA		C	Screw (3×6)
5	0CW2254K004//	AV		C	Side plate R
6	0CW2254P119//	AG		C	SB Resist adjusting plate
7	0CW040060FZBi	AA		C	Screw (M4×6)
8	0CW2254P309//	BC		C	Lead roller
9	0CW2254P349//	AN		C	Press bearing
	0CW2160P344//	AR		C	Bearing (BRG8-16)
10	0CWER070SKP//	AA		C	E type ring 7
11	0CW2254P023//	AU		C	SB upper guide
12	0CW2254P342//	AD		C	Sheet
13	0CW030080FZWS	AA		C	Screw (3×8)
14	0CW2254P212//	AR		C	Shaft
15	0CW2254P065//	AD		C	Collar
16	0CWER050SKP//	AA		C	E type ring 5
17	0CWER040SKP//	AB		C	E type ring 4
18	0CW2254P114//	AT		C	Delivery guide
19	0CW2254P311//	AX		C	Delivery roller
20	0CW2158P521B/	AE		C	Bearing 6
21	0CW2254P123//	AE		C	Collar spring
22	0CW2254P027//	AF		C	Sensor holder
23	0CWE314000619	AH		B	Photo sensor (TLP1241(C5))
24	0CW2247P727//	AT		B	Photo sensor (SNS-SPI-337)
25	0CW030100FZBB	AA		C	Screw (310)
26	0CW2254P335//	AF		C	Spring
27	0CW2254P095//	AE	N	C	Delivery sensor lever N
28	0CWHPO20100SH	AC		C	Pin (210)
29	0CW2254P075//	AD		C	Pulley gear (PLY-GER-16-18)
30	0CW2254P310//	AV		C	SB roller
31	0CW4060P012//	AE		C	Bush (BUSH-8P)
32	0CW2254P062//	AD		C	Pulley (PLY-S2M-26)
33	0CW2254P312//	AV		C	SB flapper
34	0CW2254P035//	AG		C	Flapper F
35	0CW2254P036//	AG		C	Flapper R
36	0CW2254P352//	AG		C	Bearing (B-F5-13)
37	0CW2254P024//	AU		C	SB lower guide
38	0CW2254P358//	AC		C	Turn over seal
39	0CW2254P213//	AN		C	SB collar shaft
40	0CW2254P068//	AD		C	SB collar
41	0CW2254P226//	AF		C	SB release shaft
42	0CW2254P122//	AD		C	SB collar spring
43	0CW338422//	AB		C	Bearing 6
44	0CW2254P220//	AM		C	SB collar shaft 2
45	0CW2254P074//	AD		C	Lead collar
46	0CWER030SKP//	AA		C	E type ring 3
47	0CW2254P142//	AA		C	SB reinforce
48	0CW2254P121//	AE		C	Lead collar spring
50	0CW2254P030//	AD		C	Bearing B
51	0CW2254P333//	AD		C	Screw (M3)
52	0CW2254P136//	AU		C	R guide
53	0CW2254P361//	AH	N	C	Sheet
54	0CW2254P210//	AS		C	Shaft
56	0CW2254P084//	AE		C	Release link 1
57	0CW2254P085//	AE		C	Release link 2
58	0CW2185P359//	AB		C	Screw (M4×12)
59	0CW2254P340//	AD		C	Lead collar spring
60	0CW2254P111//	AP		C	Lead collar guide
61	0CW2254P133//	AF		C	Lead collar spring 1
62	0CW2254P042//	AD		C	Lead collar
63	0CW2254P022//	AU		C	C guide
64	0CW2254P124//	AD		C	Delivery collar spring
65	0CW2235P045//	AF		C	Delivery collar
66	0CW030080FZBB	AB		C	Screw (M3×8)
67	0CW2254P028//	AP		C	Delivery flapper
68	0CW2254P321//	AE		C	Spring
69	0CW040120FZBi	AB		C	Screw
70	0CWE450000893	AD		C	Wire holder (EDS-0607U)
71	0CW2254K502//	AH		C	Harness (ASM-EXITS)
72	0CW2254P344//	AD		C	WPL sheet
73	0CW2254P093//	AD		C	Spaser (1.0)
74	0CW2254P343//	AE		C	Sheet
75	0CW2254P362//	AG	N	C	Guide sheet
77	0CW2254P380//	AD		C	R guide sheet 1
78	0CW2254P388//	AC	N	C	Guide sheet 2q
79	0CW2254P393//	AD	N	C	C guide sheet
80	0CW2229P389//	AD		C	Poron 2
81	0CW2254P385//	AF	N	C	Delivery flapper sheet
82	0CW2254P382//	AG	N	C	Flapper F sheet

## 64 RSPF unit 3(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
83	0CW2254P381//	AG	N	C	Flapper R sheet
84	0CW2254P374//	AD		C	Sheet
85	0CW2254P359//	AD		C	Sheet
86	0CW2254P077//	AD		C	Gear (GER-0.8-26)
87	0CWE450001128	AC		C	Wire band (RSG-100)
88	0CWE450000005	AA		C	Tight band (SKB-1N)
89	0CW2254P126//	AF		C	Bracket
90	0CW030040FZBi	AA		C	Screw (M3×4)
91	0CW2254P394//	AG	N	C	Sheet
92	0CW2254P392//	AH	N	C	R Guide sheet 2R
93	0CW2254P391//	AH	N	C	F Guide sheet 2F
94	0CW2254P377//	AF		C	C guide label
95	0CW2254P228//	AF	N	C	Delivery sensor shaft
96	0CWER020SKP//	AB	N	C	E type ring 2
97	0CW2254P094//	AK	N	C	SB-U guide face
98	0CW2185P357//	AA		C	Screw (M38)
99	0CW2254P472//	AD	N	C	KT mylar sheet 1
100	0CW2254P473//	AD	N	C	KT mylar sheet 2
101	0CW2254P477//	AF	N	C	SB lower guide mylar sheet 2
102	0CW2254P470//	AC	N	C	Poron4
103	0CW2254P471//	AD	N	C	Poron6
104	0CW2254P479//	AD	N	C	W guide mylar sheet
105	0CW2254P480//	AF	N	C	R guide mylar sheet 3
106	0CW2229P365//	AD	N	C	Poron1
107	0CWHPO20120SH	AC	N	C	Pin (22)

## 64 RSPF unit 3(for AR-505)

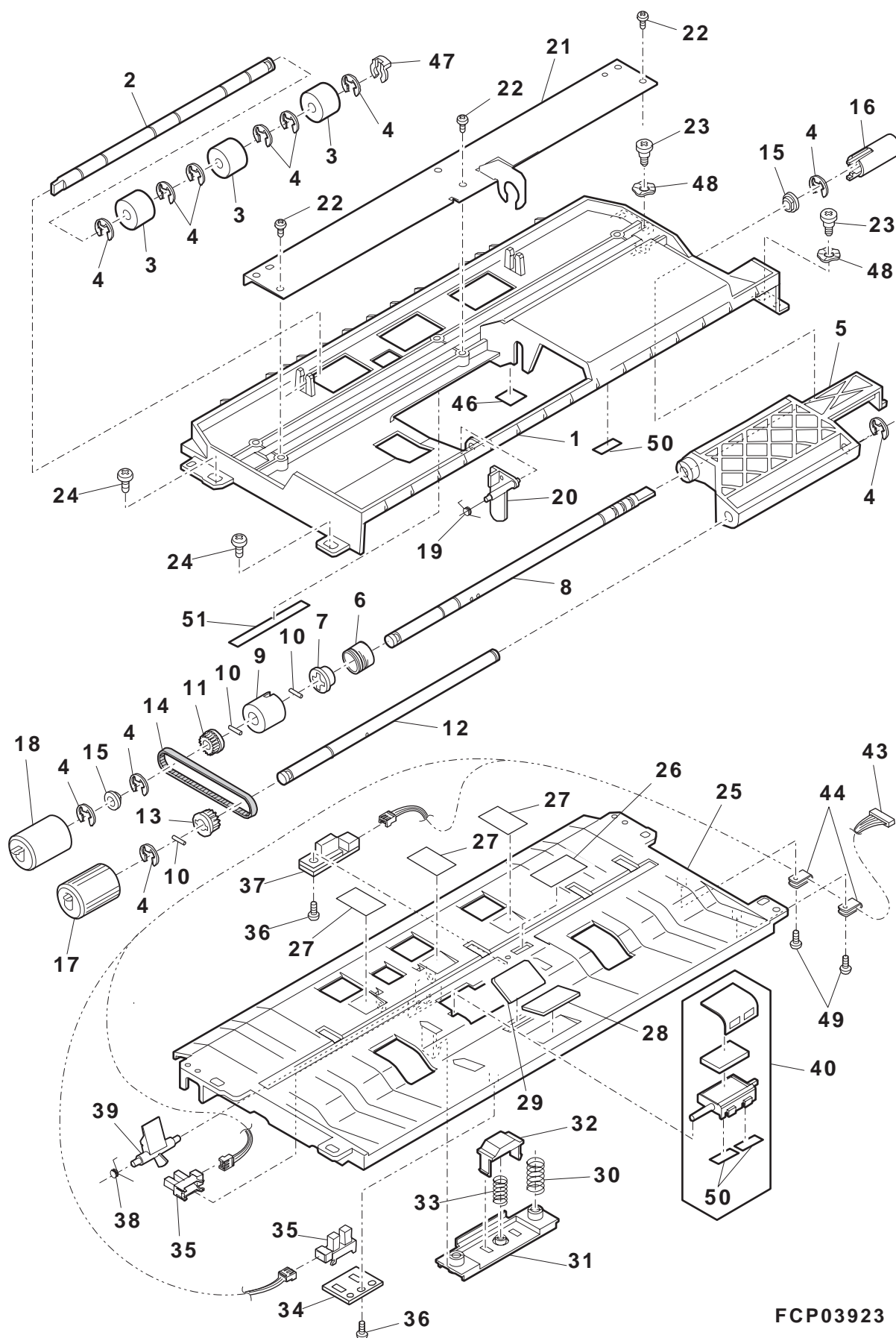


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65 RSPF unit 4(for AR-505)



FCP03923

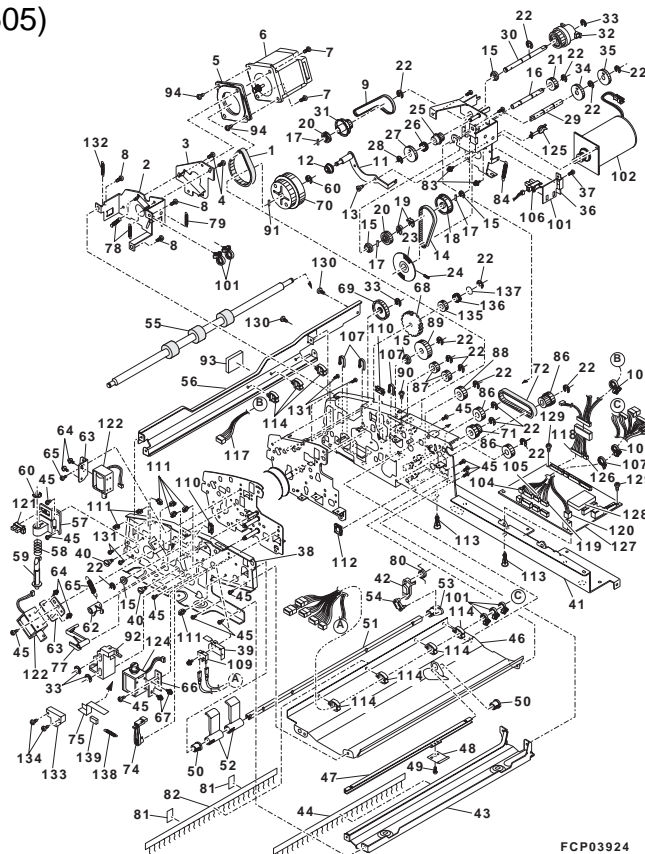
## 66 RSPF unit 5(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0CWNSBLT00185	AS		C	Belt (BELTS2M100100)
2	0CW2254P115//	AP		C	PM bracket
3	0CW2254P116//	AH		C	PM tension plate
4	0CW040080FZWS	AA		C	Screw (4x8)
5	0CW2254P353//	AT		C	S-mount
6	0CW2254P403//	BM		B	Motor (MOT-KH56KM2R002)
7	0CW040080FZBi	AA		C	Screw (M4x8)
8	0CW040080FBBi	AA		C	Screw (M4X4)
9	0CWNSBLT00092	AN		C	Belt (BELTS2M112040)
10	0CW2254K007//	AQ		C	Motor bracket
11	0CW2254K008//	AK		C	Tension plate ass'y
12	0CW2254P082//	AD		C	Tension pulley
13	0CW2106P091//	AC		C	Screw (1.2)
14	0CWNSBLT00072	AS		C	Belt (BELTS2M080060)
15	0CW2158P521B/	AE		C	Bearing 6
16	0CW2254P204//	AM		C	Stopper shaft
17	0CWHP020100SH	AC		C	Pin (2X10)
18	0CW2254P010//	AF		C	Pulley (PLY-S2M-50)
19	0CW2166P034A/	AD		C	Clip (CLIP-5)
20	0CW2254P012//	AD		C	Gear (GER-0.8-24)
21	0CW2254P083//	AD		C	Gear (GER-0.8-20)
22	0CWER050SKP//	AA		C	E type ring 5
23	0CW2210P312//	AR		C	Pulley (PULLEY-CLK-S2M-16)
24	0CW030060FPWP	AA		C	Screw (M3x6)
25	0CW2254P079//	AD		C	Gear (GER-0.8-14)
26	0CW2254P314//	AH		C	Limit spring
27	0CW2254P078//	AE		C	Gear (GER-0.8-33)
28	0CWER040SKP//	AB		C	E type ring 4
29	0CW2254P200//	AP		C	Separator shaft 1
30	0CW2254P203//	AM		C	Clutch shaft
31	0CW2254P081//	AF		C	Pulley gear (PLY-GER-42-15)
32	0CW2254P402//	BB		C	Clutch (CLU-MIC5NE-20)
33	0CWER030SKP//	AA		C	E type ring 3
34	0CW2254P080//	AP		C	Gear (GER-0.8-30-OW)
35	0CW2254P011//	AP		C	Gear (GER-0.8-40-OW)
36	0CW2254P137//	AF		C	Bracket
37	0CW030060FZBP	AA		C	Screw (3x6)
38	0CW2254K005//	BA		C	F side plate
39	0CW2254P141//	AH		C	MSW lever N
40	0CW2254P326//	AD		C	Screw (M4)
41	0CW2254K006//	BG		C	Side plate R ass'y
42	0CW2254P016//	AE		C	Shutter link
43	0CW2254P134//	AS		C	Stay
44	0CW2254P365//	AR		C	SB discharger
45	0CW040060FZBP	AB		C	Screw (4x6)
46	0CW2254P101//	AT		C	Plate
47	0CW2254P106//	AH		C	Release angle
48	0CW2254P105//	AE		C	Paper separation spring
49	0CW030040FZBP	AA		C	Screw
50	0CW2254P029//	AE		C	Supporter
51	0CW2254P103//	AG		C	Shutter angle
52	0CW2254P015//	AE		C	Shutter
53	0CW2254P014//	AD		C	Shutter arm
54	0CW2254P017//	AD		C	Shutter rod
55	0CW2254P303//	BA		C	Resist roller
56	0CW2254P112//	AN		C	L reinforce
57	0CW2254P057//	AF		C	Open sensor holder
58	0CW2254P338//	AC		C	Spring
59	0CW2254P058//	AE		C	Open sensor lever
60	0CWER070SKP//	AA		C	E type ring 7
62	0CW2254P031//	AD		C	SB solenoid link
63	0CW2254P117//	AE		C	Flapper solenoid bracket
64	0CW030050FZWS	AA		C	Screw (M3x5)
65	0CW2254P320//	AD		C	Spring
66	0CW2254P118//	AE		C	SB Solenoid bracket
67	0CW030060FZWS	AA		C	Screw (3x6)
68	0CW2254P026//	AF		C	Jam dial
69	0CW2254P092//	AE		C	Gear (GER-0.8-43-N)
70	0CW2254P076//	AK		C	Pulley gear (PLY-GER-86-58)
71	0CW2254P073//	AD		C	Gear (GER-18-24)
72	0CWNSBLT00058	AP		C	Belt (BELTS2M065060)
73	0CW2254P072//	AD		C	Pulley gear (PLY-GER-22-24)
74	0CW2254P004//	AF		C	Release lever
75	0CW2254P100//	AH		C	Release lever spring
76	0CW030060FZBi	AA		C	Screw (3x6)
77	0CW2254P069//	AE		C	H flapper lever
78	0CW2254P330//	AD		C	PM tension spring 1
80	0CW2254P304//	AE		C	Shutter spring
81	0CW2254P366//	AD		C	Delivery sheet
82	0CW2254P348//	AR		C	Discharger

## 66 RSPF unit 5(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
83	0CW030080FZWS	AA		C	Screw (3×8)
84	0CW2254P319//	AD		C	Spring (ASM-MCLK)
85	0CW023120FBWS	AB		C	Screw (M2.3×12)
86	0CW2254P062//	AD		C	Pulley (PLY-S2M-26)
87	0CW2210P092//	AD		C	Pulley (G-18-0.8-5)
89	0CW2254P013//	AP		C	Gear (GER-0.8-40-OW)
91	0CWSP03016FPA	AC		C	Spring pin (3×16)
92	0CW2254P032//	AF		C	Lever
93	0CW2254P346//	AF		C	Protection sheet
94	0CW040060FZSW	AC		C	Screw (M4×6)
101	0CWE450001128	AC		C	Wire band (RSG-100)
102	0CW2254P404//	BN		B	Motor (MOT-NA4565D03)
104	0CW2254K516//	AH		C	Harness (ASM-DCMOT)
105	0CW2254K506//	AN		C	Harness (ASM-CL)
106	0CWE314000625	AL		B	Photo interrupter (GP1A73A)
107	0CWE450000005	AA		C	Tight band (SKB-1M)
109	0CWE120001551	AM		B	Micro switch (DE2L-FAAA)
110	0CWE450000384	AB		C	Edge saddle (EDS-2)
111	0CWE450000574	AC		C	Wire clamp (UAMS-05S-2)
112	0CWE450000893	AD		C	Wire holder (EDS-0607U)
113	0CWE450000706	AD		C	Spacer (KGLS-8RT)
114	0CWE450000732	AC		C	Wire clamp (UAMS-05SN)
117	0CW2254K500//	AG		C	Harness (ASM-RDS)
118	0CW2254K518//	AR		C	Harness (ASM-CYUKEI)
119	0CW2254K511//	AN		C	Harness (ASM-SOL)
120	0CW2254K517//	AL		C	Harness (ASM-SW)
121	0CWE314000619	AH		B	Photo sensor (TLP1241(C5))
122	0CW2254P400//	AY		C	Solenoid (SOL-TDS-10SL-543)
124	0CW2254P401//	AY		C	Solenoid (SOL-TDS-10A-1018)
125	0CWE450001130	AF		C	Spacer (SCLS-370-10-01)
126	0CW2254K519//	AF		C	Harness (ASM-MCLK)
127	0CW2254K530//	CA	N	E	PBA-Control
128	0CW2254K550//	AZ		E	EP ROM ass'y
129	0CW040120FZBB	AB		C	Screw
130	0CW4015P164//	AC	N	C	Screw (M46)
131	0CW040060FZBi	AA		C	Screw (M46)
132	0CW2254P399//	AD	N	C	Spring
133	0CW2254P097//	AE	N	C	Glass stopper
134	0CW030050FZBi	AA		C	Screw (M35)
135	0CW2254P481//	AD	N	C	Gear (GER-0.8-15-JAMD)
136	0CW2254P482//	AD	N	C	Spring
137	0CWHW060FZN//	AA	N	C	Washer (M6)
138	0CW2254P486//	AE	N	C	Release spring
139	0CW2254P476//	AD	N	C	Release cushion

## 66 RSPF unit 5(for AR-505)



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## 67 RSPF unit(PWB section)(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	0CW73303Z104H	AB		C	Capacitor (GRM40F104Z50PT) [C10,67]
2	0CWE73303Z105	AD		C	Capacitor (GRM40F105Z16PT) [C6,35,41,59,62,68,69,70,88]
3	0CWE73495K102	AB		C	Capacitor (GRM39B102K50PT) [C38,40,42,45,46,48,50,51,54,73]
	0CWE73495K102	AB		C	Capacitor (GRM39B102K50PT) [C75~C87,C89~C102]
4	0CWE73495K103	AB		C	Capacitor (GRM39B103K50PT) [C16,17,19,21,22,24~C28]
	0CWE73495K103	AB		C	Capacitor (GRM39B103K50PT) [C30,31,43,44,49,66]
5	0CWE73497Z104	AA		C	Capacitor (GRM39F104Z25PT) [C1,2,4,5,7,8,9,11,12,20,23,33]
	0CWE73497Z104	AA		C	Capacitor (GRM39F104Z25PT) [C36,37,39,56,58,63,71,72,74]
6	0CWE73488M105	AC		C	Capacitor (SME50VB1MFC) [C18]
7	0CWE73488M476	AC		C	Capacitor (SME16VB47MFC) [C29,47]
8	0CWE73492M127	AE		C	Capacitor (LXV50VB120MH20FC) [C52]
9	0CWE73490M107	AC		C	Capacitor (SMG16VB100MFC) [C53]
10	0CWE73496J101	AA		C	Capacitor (GRM39CH101J50PT) [C55,64]
11	0CWE73328K334	AC		C	Capacitor (GRM40B334K16PT) [C15]
12	0CWE73388J390	AB		C	Capacitor (GRM39CH390J50PT) [C3,34]
13	0CWE73537K221	AB		C	Capacitor (GRM39X7R221K200PT) [C32,57,60,61]
14	0CWE73388J180	AB		C	Capacitor (GRM39CH180J50PT) [C14]
15	0CWE73388J220	AB		C	Capacitor (GRM39CH220J50PT) [C13]
16	0CWE73495K561	AB		C	Capacitor (GRM39B561K50PT) [C65]
17	0CWE74340WE10	AE		C	Connector (1-173981-0) [CN7]
18	0CWE74340WE11	AE		C	Connector (1-173981-1) [CN11]
19	0CWE74291WE04	AC		C	Connector (53258-0420) [CN2]
20	0CWE74340WE06	AD		C	Connector (173981-6) [CN5]
21	0CWE74291WE02	AD		C	Connector (53258-0220) [CN3]
22	0CWE74436WE02	AC		C	Connector (B2B-XH-A) [CN14]
23	0CWE74436WE06	AD		C	Connector (B6B-XH-A) [CN15]
24	0CWE74322WE07	AD		C	Connector (53253-0710) [CN1]
25	0CWE74340WE05	AD		C	Connector (173981-5) [CN4]
26	0CWE74322WE09	AD		C	Connector (53253-0910) [CN9]
27	0CWE74340WE12	AF		C	Connector (1-173981-2) [CN10]
28	0CWE74340WE03	AC		C	Connector (173981-3) [CN6]
29	0CWE120001505	AF		C	Circuit protector (ICP-N15 T104) [CP1]
30	0CWE311000978	AD		B	Diode (SB02-03Q) [D2,4]
31	0CWE311001033	AC		B	Diode (HSM223C) [D1,5,8]
32	0CWE311001047	AD		B	Diode (SC016-4) [D6]
33	0CWE311001049	AE		B	Diode (D1FS6) [D3,7,9]
34	0CWE311000991	AD		B	Diode array (DCC010-TB) [DA1,2,3]
35	0CWE321000320	AK		B	IC (M51953BFP) [IC7]
36	0CWE323000315	BB		B	IC (M37702S1AFP) [IC1]
37	0CWE321000636	AG		B	IC (LA6324NM) [IC10]
38	0CWE321000706	AR		B	IC (MB88347PF-G-BND-EF) [IC6]
39	0CWE321000717	BE		B	IC (STK672-050) [IC4]
40	0CWE7702006//	AG		B	IC (HD74LS06FP) [IC11]
41	0CWE323000355	AK		B	IC (93LC46ATSN) [IC9]
42	0CW2254P999//	AT		B	IC (LSI-LC22017CT-RB2) [IC2]
43	0CWE7704914//	AF		B	IC (HD74LV14FP) [IC8]
44	0CWE321000703	AF		B	IC (LA6339ML) [IC5]
45	0CWE7703200F//	AF		B	IC (TC7W00F) [IC13]
46	0CWE230000036	AN		C	Coil (SK-5M-4) [L1,4]
47	0CWE2500000182	AN		B	Cristal (HC-49/U03 12.800MHZ) [OSC1]
48	0CWE2500000141	AG		B	Ceramic resonator (CST5.0MGW040) [OSC2]
49	0CWE2400000393	AL		B	Posistor (PTH8L13AR6R8M6C053) [PTH1]
50	0CWE312001081	AB		B	Transistor (FA1L3N) [Q5,6,19]
51	0CWE312000090	AC		B	Transistor (2SC2712GR) [Q8,9,10]
52	0CWE312001293	AR		B	Transistor (2SJ265) [Q17]
53	0CWE312001337	AE		B	Transistor (RN2424) [Q18]
54	0CWE312001282	AH		B	Transistor (2SK1471) [Q1,4,14,15]
55	0CWE312001377	AE		B	Transistor (FC144) [Q3]
56	0CWE312001241	AM		B	Transistor (2SK1895) [Q21,22]
57	0CWE312001290	AS		B	Transistor (ASJ264) [Q13,16]
58	0CWE70228J821	AA		C	Resistor (RK73K1JTD820J) [R1]
59	0CWE70228J472	AA		C	Resistor (RK73K1JTD 4.7KΩ) [R4,7,11,12,13,17,37,61,99,135,140,152]
60	0CWE70228J223	AA		C	Resistor (RK73K1JTD 22KΩ) [R18,19,20]
61	0CWE70228J105	AA		C	Resistor (RK73K1JTD 1MΩ) [R2,3]
62	0CWE70228J102	AA		C	Resistor (RK73K1JTD 1KΩ) [R14,15,24,29,51,81,82,154]
63	0CWE70228J104	AA		C	Resistor (RK73K1JTD 100KΩ) [R22]
64	0CWE70231F103	AA		C	Resistor (RK73H1JTD10KF) [R96]
65	0CWE70228J103	AA		C	Resistor (RK73K1JTD 10KΩ) [R21,44,45,47,49,50,53,54,55]
	0CWE70228J103	AA		C	Resistor (RK73K1JTD 10KΩ) [R57,80,97,98,104,106,109,112,113]
	0CWE70228J103	AA		C	Resistor (RK73K1JTD 10KΩ) [R114~117,R119,120,122,124]
	0CWE70228J103	AA		C	Resistor (RK73K1JTD 10KΩ) [R125,127,129,131,142,147,148,150,153,156]
66	0CWE70226J680	AA		C	Resistor (RK73K2ESTD 82Ω) [R83,84,85]
67	0CWE70228J331	AA		C	Resistor (RK73K1JTD330J) [R25,26,27]
68	0CWE70225J100	AA		C	Resistor (RK73K2ATD10Ω) [R23]
69	0CWE70226J222	AA		C	Resistor (RK73K2ESTD2.2KJ) [R10,74,95]
70	0CWE70231F102	AA		C	Resistor (RK73H1JTD1KΩF) [R9,42,46,62,63]
71	0CWE70231F682	AA		C	Resistor (RK73H1JTD11KF) [R6,33,34]
72	0CWE70106JR22	AC		C	Resistor (RSSX2 0.22Ω) [R39,40]
73	0CWE70228J154	AA		C	Resistor (RK73K1JTD 150KΩ) [R36]
74	0CWE70225J102	AA		C	Resistor (RK73K2ATD1KJ) [R87]

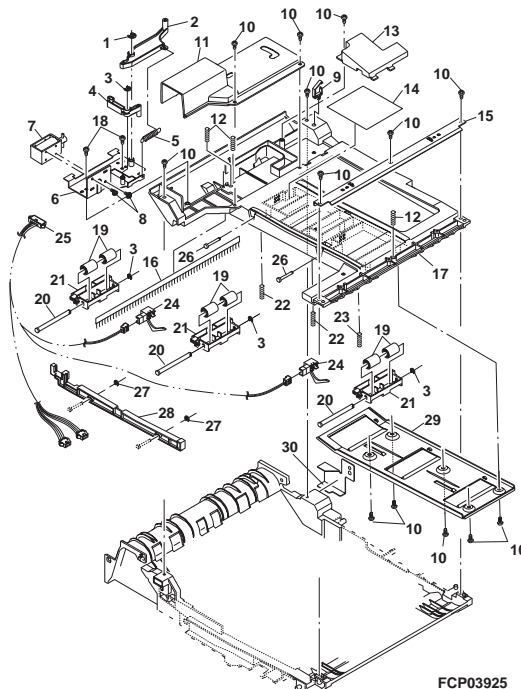
# 67 RSPF unit(PWB section)(for AR-505)

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
75	0CWE70231F473	AA		C	Resistor (RK73H1JTD47KF) [R35,41,126]
76	0CWE70231F152	AA		C	Resistor (RK73H1JTD1.5KΩF) [R38,132]
77	0CWE70231F222	AA		C	Resistor (RK73H1JTD2.2KF) [R8]
78	0CWE70225J562	AA		C	Resistor (RK73K2ATD5.6KΩJ) [R5]
79	0CWE70226J182	AA		C	Resistor (RK73K2ESTD1.8KJ) [R144]
80	0CWE70226J272	AA		C	Resistor (RK73K2ESTD2.7KJ) [R30,52,71,72]
81	0CWE70228J153	AA		C	Resistor (RK73K1JTD 15KΩJ) [R32,R48,90~R93]
82	0CWE70225J361	AA		C	Resistor (RK73K2ATD 360ΩJ) [R58,59,60,88,94,151]
83	0CWE70225J182	AA		C	Resistor (RK73K2ATD 1.8KJ) [R75,103]
84	0CWE70231F472	AA		C	Resistor (RK73H1JTD4.7KF) [R28,121]
85	0CWE70231F101	AA	N	C	Resistor (RK73H1JTD100ΩF) [R31,110,111,108,139,141]
86	0CWE71047J103	AC		B	Block resistor (CN1J4TD10KJ) [RA1,2,3]
87	0CWE240000317	AK		A	Fuse (RXE250) [F1]
88	0CWE420001011	AC		C	Check pin (LC-3-SBK) [TP32,33,34,48]
89	0CWE76005A6R2	AE		B	Zener diode (RD6.2FB) [ZD4]
90	0CWE76008H160	AD		B	Zener diode (RD16MB2) [ZD1,2,5]
91	0CWE74269BK28	AD		C	IC Socket(for IC3) (2-641605-3)

# 68 ADU unit 1

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XRESP70-08000	AA		C	E type ring
2	MLEVP0765FCZZ	AE		C	ADU release lever
3	XRESP50-06000	AA		C	E type ring
4	MLEVP0757FCZZ	AC		C	Separator solenoid lever
5	MSPRC2653FCZZ	AC		C	Separator spring
6	CPLTM5444FC01	AM		C	Separator solenoid fixing plate
7	RPLU-0314FCZZ	BC		B	Cylinder solenoid
8	XBPSD30P06KS0	AA		C	Screw (3×6KS)
9	LHLDW1057FCZZ	AB		C	Wire holder (LWS35)
10	XEBSD40P12000	AA		C	Screw (4×12)
11	PCÖVP1459FCZZ	AK		C	Solenoid cover
12	MSPRC2691FCZZ	AB		C	ADU earth spring
13	PCÖVP1458FCZZ	AF		C	ADU harness cover
14	TLABH4244FCZZ	AE		C	JAM instruction label
15	PGiDH1795FCZZ	AF		C	ADU upper exit paper guide
16	PBRSS0196FCZZ	AK		B	ADU discharge brush
17	PGiDM1812FCZZ	AY		C	ADU upper paper guide
18	XHBSD40P08000	AA		C	Screw (4×8)
19	NRÖLP0896FCZZ	AC		C	Transport roller
20	NSFTZ2476FCZZ	AL		C	ADU separator shaft
21	MARMP0249FCZZ	AE		C	Roller separator arm
22	MSPRC2654FCZ1	AB		C	Separator pressure spring
23	MSPRC2701FCZZ	AC		C	Separator pressure spring B
24	QSW-Z0516FCZZ	AP		B	DPPD1 switch
25	DHAi-2870FCZZ	AK		C	ADU upper PG harness
26	NSFTZ2492FCZZ	AB		C	Separator link slide shaft
27	XRESP20-04000	AA		C	E type ring
28	LPLTP5455FCZZ	AE		C	Separator link plate
29	PGiDH1794FCZZ	AM		C	ADU paper guide upper B
30	PSHEP4667FCZZ	AD		C	ADU connector protection sheet

# 68 ADU unit 1



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## 69 ADU unit 2

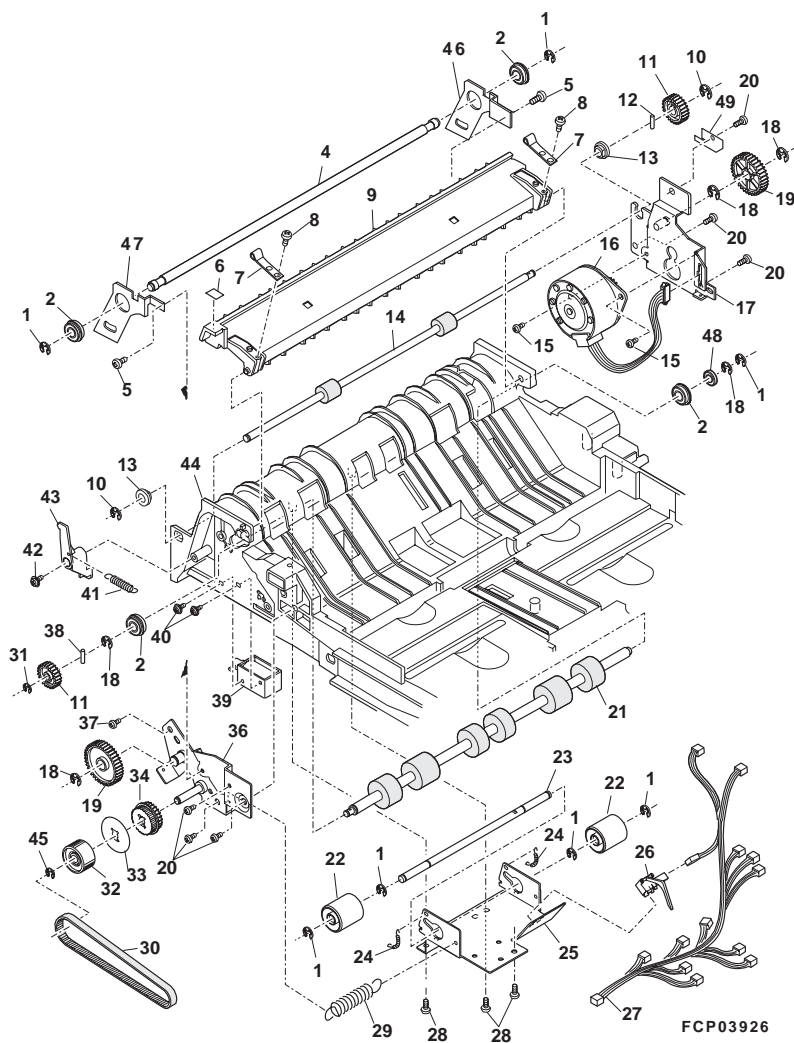
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	XRESP50-06000	AA		C	E type ring
2	NBRGY0466FCZZ	AK		B	Ball bearing
4	NSFTZ2475FCZZ	AP		C	Shaft
5	LX-BZ0503FCZZ	AA		C	Screw (4×8)
6	TLABZ4245FCZ1	AB		C	PG label
7	MSPRP1881FCZ1	AF		C	Size G lock plate N
8	XEBSD30P08000	AA		C	Screw (3×8)
9	PGIDM1814FCZZ	AQ		C	ADU paper guide
10	XRESP40-06000	AA		C	E type ring
11	NGERH0755FCZZ	AB		C	Gear (26T)
12	LPIINS0320FCZZ	AB		C	Spring pin (φ2×8)
13	NBRGC0387FCZZ	AB		C	Bearing
14	NRÖLR1221FCZZ	AQ		C	Turnover roller [AR-405]
	NRÖLR1291FCZZ		N	C	Turnover roller [AR-505]
15	XHBSD40P08000	AA		C	Screw (4×8)
16	RMÖTP0830FCZZ	AY		B	DSBM turnover motor
17	CPLTM5443FC02	AH		C	ADU motor fixing plate
18	XRESP70-08000	AA		C	E type ring
19	NGERH0493FCZZ	AD		C	Gear (46T)
20	XEPSD40P10000	AA		C	Screw (4×10)
21	NRÖLR1222FCZZ	AY		C	ADU turnover roller (Inch series)
	NRÖLR1275FCZZ	AY		C	ADU turnover roller (AB series)
22	PCLR-0421FCZ1	AF		C	Turnover collar
23	NSFTZ2474FCZZ	AL		C	Turnover roller
24	MSPRC2604FCZZ	AD		C	Pressure spring
25	LPLTM5447FCZZ	AH		C	DPPD1 fixing plate
26	QSW-Z0516FCZZ	AP		B	DPPD1 switch
27	DHAi-2868FCZZ	BA		C	ADU harness
28	XEBSD40P12000	AA		C	Screw (4×12)
29	MSPRC1312FCZZ	AB		C	Spring
30	NBLTH0153FCZZ	AF		B	Belt B
31	XRESP40-06000	AA		C	E type ring
32	JKNBZ0135FCZZ	AD		C	ADU knob
33	PSHEP4549FCZZ	AC		C	ADU flange sheet
34	NGERH0557FCZZ	AC		C	Gear (30/36T)
36	CPLTM5445FC01	AQ		C	Drive boss fixing plate
37	LX-BZ0823FCZZ	AB		C	Screw (4×10)
38	LPIINS0165FCZZ	AB		C	Pin (φ2×8)
39	RPLU-0310FCZZ	AR		B	Solenoid
40	XBPSD30P06KS0	AA		C	Screw (3×6KS)
41	MSPRC2651FCZZ	AB		C	Gate spring
42	XEPSD30P08X00	AA		C	Screw (3×8X)
43	LANGT1396FCZZ	AC		C	Gate angle
44	LFRM-0963FCZZ	BB		C	ADU frame
45	LX-WZ0316FCZZ	AA		C	Washer
46	LPLTM5680FCZZ	AD		C	[AR-405]
	LPLTM5691FCZZ	AD	N	C	[AR-505]
	LPLTM5681FCZZ	AD		C	[AR-405]
47	LPLTM5692FCZZ	AD	N	C	[AR-505]
48	NBRGP0573FCZZ	AF		C	Bearing
49	QEARP0109FCZZ	AD		C	Earth frame

## 70 ADU unit 3

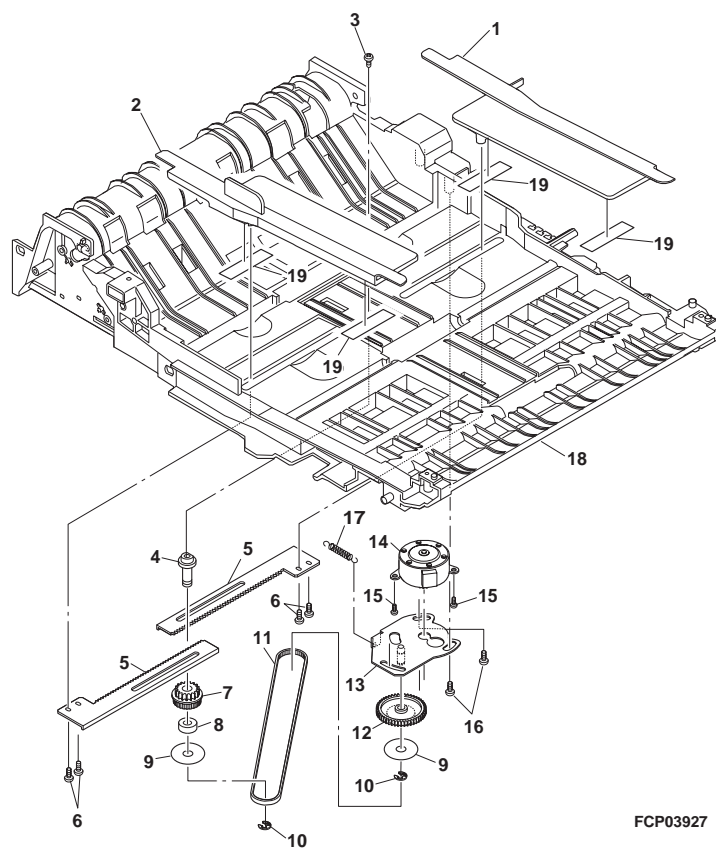
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LPLTP5454FCZZ	AH		C	Adjustment plate R
2	LPLTP5453FCZZ	AH		C	Adjustment plate F
3	XBPSD30P08000	AA		C	Screw (3×8)
4	NSFTZ2477FCZZ	AG		C	Size guide boss A
5	NGERR1230FCZZ	AF		C	Rack gear
6	XEBSD40P08000	AA		C	Screw (4×8)
7	NGERH1228FCZZ	AD		C	Belt gear
8	NBRGY1032HCZZ	AB		B	Bearing
9	PSHEP2340FCZZ	AA		C	Flange sheet DUP
10	XRESP50-06000	AA		C	E type ring
11	NBLTH0296FCZZ	AG		B	232MXL belt
12	NGERH1270FCZZ	AE		C	Adjustment gear
13	CPLTM5450FC01	AH		C	SG motor adjust plate
14	RMÖTP0566FCZZ	AV		B	Pulse motor A
15	XEBSD30P08000	AA		C	Screw (3×8)
16	XEBSD40P12000	AA		C	Screw (4×12)
17	MSPRT1944FCZZ	AA		C	Belt tension spring
18	LFRM-0963FCZZ	BB		C	ADU frame
19	PSHEZ4774FCZZ	AC	N	C	Sheet



# 69 ADU unit 2



# 70 ADU unit 3

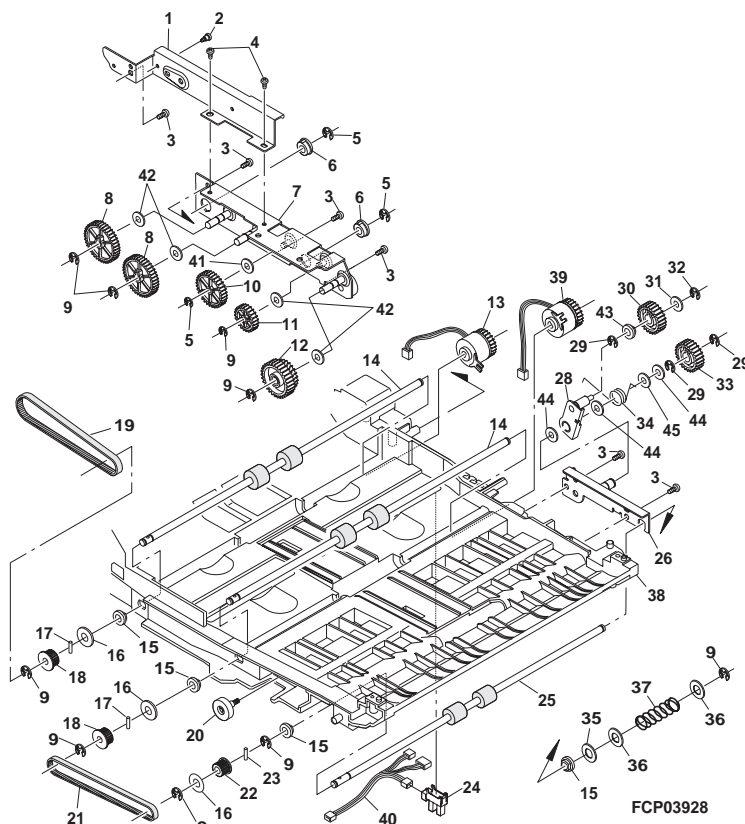




## 71 ADU unit 4

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
1	LANGT1397FCZZ	AK		C	ADU fixing angle R
2	LX-BZ0823FCZZ	AB		C	Screw (4×10)
3	XEPSD40P10000	AA		C	Screw (4×10)
4	XHBSD40P08000	AA		C	Screw (4×8)
5	XRESP40-06000	AA		C	E type ring
6	NBRGC0136FCZZ	AC		C	Bearing
7	CFRM-0964FC01	AQ		C	ADU drive frame
8	NGERH0254FCZZ	AC		C	DV gear (36T)
9	XRESP50-06000	AA		C	E type ring
10	NGERH0066GCZZ	AC		C	Gear C (31T)
11	NGERH0885FCZZ	AC		C	Gear (22T)
12	CGERH1268FC02	AG		C	ADU gear (24/30T)
13	PCLC-0290FCZZ	AV		B	ADU transport clutch
14	NRÖLR1223FCZ1	AS		C	ADU transport roller 2
15	NBRGC0387FCZZ	AB		C	Bearing
16	LX-WZ0328FCZZ	AA		C	Flange spacer (φ16)
17	LPIINS0075FCZZ	AB		C	Pin (φ3×10)
18	NPLYZ0254FCZZ	AD		C	Pulley 24
19	NBLTH0153FCZZ	AF		B	Belt B
20	NBRGY0592FCZZ	AF		B	ADU guide collar
21	NBLTH0295FCZZ	AG		B	145MXL belt
22	NPLYZ0282FCZZ	AC		C	Pusher drive pulley
23	LPIINS0320FCZZ	AB		C	Spring pin (φ2×8)
24	VHPGP1A71A1-1	AG		B	Photo sensor (GP1A71A1)
25	NRÖLR1224FCZZ	AQ		C	ADU transport roller 3
26	CFRM-0970FC01	AH		C	ADU drive frame B
27	LX-WZ0017FCZZ	AA		C	Adjusting washer
28	CARM0240FC01	AM		C	Drive joint arm
29	XRESP70-08000	AA		C	E type ring
30	NGERH0111FCZZ	AD		C	Gear (24T)
31	LX-WZ0139FCZZ	AA		C	Washer (T08φ5-12)
32	XRESP30-04000	AA		C	E type ring
33	NGERH0128FCZZ	AC		C	Gear (24T)
34	MSPRC2652FCZZ	AC		C	Joint arm spring
35	LX-WZ0112FCZZ	AA		C	Separator boss C washer
36	LX-WZ0325FCZZ	AA		C	Washer (φ6-12)
37	MSPRC2702FCZZ	AC		C	ADU brake spring
38	LFRM-0963FCZZ	BB		C	ADU frame
39	PCLC-0291FCZZ	AY		B	ADU transport clutch B
40	DHAI-2869FCZZ	AH		C	ADU frame unit harness
41	LX-WZ0227FCZZ	AA		C	Washer
42	LX-WZ0278FCZZ	AA		C	Washer
43	PCLR-0448FCZZ	AE		C	ADU collar (φ27)
44	LX-WZ0070FCZZ	AA		C	MG roller washer
45	LX-WZ0042FCZ1	AA		C	Washer

## 71 ADU unit 4



## ■ Index

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
[C]					
CARM0240FC01	71- 28	AM		C	
CBOX-0116FCE1	15-901	BT		E	
CBOX-0116FCE2	15-901	BT		E	
CBOX-0116FCE3	15-901	BP	N	E	
CBOX-0117FCE1	14-901	BH		E	
CBOX-0117FCE2	14-901	BH		E	
CBOX-0117FCE3	14-901	BH		E	
CBOX-0117FCE4	14-901	BH		E	
CBOX-0117FCE5	14-901	BA	N	E	
CBOX-0117FCE6	14-901	BA	N	E	
CBTN-0239FC02	3- 18	AN		C	
CBTN-0239FC03	3- 18	AN		C	
CBTN-0239FC05	3- 18	AN	N	C	
CBTN-0241FC01	3- 20	AH		C	
CBTN-0242FC01	3- 22	AL		C	
CCAB-0888FC36	1- 10	BD		E	
CCAB-0888FC37	1- 10	BD		E	
CCAB-0888FC38	1- 10	BD		E	
CCAB-0888FC46	1- 10	BC		E	
CCAB-0888FC47	1- 10	BC		E	
CCAB-0888FC48	1- 10	BC		E	
CCAB-0888FC49	1- 10	BC		E	
CCAB-0888FC50	1- 10	BD		E	
CCAB-0888FC51	1- 10	BD		E	
CCAB-0888FC52	1- 10	BD		E	
CCAB-0888FC53	1- 10	BD		E	
CCAB-0907FC02	2- 21	BD		D	
CCAB-0927FC32	1- 10	BD		E	
CCAB-0927FC33	1- 10	BD		E	
CCAB-0927FC35	1- 10	BD	N	E	
CCAB-0927FC36	1- 10	BD	N	E	
CCASP0173FC32	38-901	BP		E	
CCASP0173FC33	38-901	BP		E	
CCASP0173FC37	38-901	BP		E	
CCASZ0067FC01	39- 32	AD		D	
CCASZ0285FC51	37-901	BC		E	
CCLR-0372FC01	34- 35	AH		C	
CCLR-0372FC02	34- 35	AM		C	
CCLR-0445FC01	15- 9	AH		C	
CCLR-0445FC02	15- 9	AH		C	
CCLR-0456FC01	15- 9	AL	N	C	
CCOVP1453FC01	5- 11	AQ		C	
CDAIU0577FC31	12- 5	BE		E	
CDAIU0578FC31	5- 14	BZ		E	
CDAIU0578FC32	5- 14	BZ		E	
CDAIU0578FC33	5- 14	BX		E	
CFIX-0517FC02	1- 33	AR		C	
CFIX-0517FC03	1- 33	AR		C	
CFRM-0939FC01	24- 38	AR		C	
"	25- 25	AR		C	
CFRM-0939FC53	12- 7	BT		E	
"	24-901	BT		E	
"	25-901	BT		E	
CFRM-0939FC54	12- 7	BT		E	
"	24-901	BT		E	
"	25-901	BT		E	
CFRM-0939FC55	12- 7	BU	N	E	
"	24-901	BU	N	E	
"	25-901	BU	N	E	
CFRM-0940FC01	24- 32	AZ		C	
CFRM-0941FC02	24- 15	AM		C	
CFRM-0943FC01	28- 3	AL		C	
CFRM-0943FC51	12- 2	AZ	N	E	
CFRM-0943FC52	12- 2	AZ	N	E	
CFRM-0943FC71	28-901	AZ	N	E	
CFRM-0943FC72	28-901	AZ	N	E	
CFRM-0945FC02	27- 5	AU		C	
CFRM-0945FC31	12- 6	BV		E	
"	26-901	BV		E	
"	27-901	BV		E	
CFRM-0945FC33	12- 6	BU		E	
"	26-901	BU		E	
"	27-901	BU		E	
CFRM-0945FC34	12- 6	BW	N	E	
"	26-901	BW	N	E	
"	27-901	BW	N	E	
CFRM-0946FC02	26- 24	BA		C	
"	27- 18	BA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
CFRM-0946FC03	26- 24	BA	N	C	
CFRM-0948FC01	29- 11	AT		C	
CFRM-0948FC02	29- 11	AR	N	C	
CFRM-0953FC01	17- 23	AU		C	
CFRM-0953FC02	17- 23	AS		C	
CFRM-0954FC02	22- 21	AL		C	
CFRM-0956FC01	31- 17	AW		C	
"	32- 4	AW		C	
CFRM-0956FC31	31-901	BS		E	
"	32-901	BS		E	
CFRM-0964FC01	71- 7	AQ		C	
CFRM-0970FC01	71- 26	AH		C	
CFRM-1014FC01	18- 29	AQ	N	C	
CGERH1265FC01	15- 25	AF		C	
CGERH1268FC02	71- 12	AG		C	
CGIDH1781FC51	37- 10	AP		E	
CGIDH1791FC01	30- 7	AT		C	
CHLDZ1382FC31	6- 2	BF		E	
"	8-901	BF		E	
CINSE1830FC53	39- 37	BF	N	D	
CINSE1831FC52	39- 37	BF		D	
CINSE1850FC51	39- 37	AZ		D	
CINSE1851FC51	39- 39	AN		D	
CINSE1852FC52	39- 37	BA	N	D	
CINSE1855FC51	39- 37	BB		D	
CINSE1864FC51	39- 37	BF		D	
CINSE1865FC51	39- 39	BF		D	
CINSE1866FC52	39- 37	BA	N	D	
CINSE1869FC51	39- 37	BB		D	
CINSE1901FC51	39- 37	AY	N	D	
CINSE1902FC51	39- 39	AP	N	D	
CINSE1903FC51	39- 37	BA	N	D	
CINSE1906FC51	39- 37	BF	N	D	
CINSF1833FC53	39- 37	BF	N	D	
CINSF1853FC52	39- 37	BE	N	D	
CINSF1867FC52	39- 37	BE	N	D	
CINSF1904FC51	39- 37	BF	N	D	
CINSG1832FC52	39- 37	BF		D	
CINSG1854FC51	39- 37	BE		D	
CINSG1868FC51	39- 37	BE		D	
CINSH1836FC52	39- 37	BF		D	
CINSH1858FC51	39- 37	BE		D	
CINSH1872FC51	39- 37	BE	N	D	
CINSI1835FC52	39- 37	BF		D	
CINSI1857FC51	39- 37	BE		D	
CINSI1871FC51	39- 37	BE	N	D	
CINSR1838FC51	39- 37	BF		D	
CINSR1860FC51	39- 37	BE		D	
CINSR1874FC51	39- 37	BE	N	D	
CINSS1834FC52	39- 37	BF		D	
CINSS1856FC51	39- 37	BE		D	
CINSS1870FC51	39- 37	BE	N	D	
CINSS1907FC51	39- 37	BF	N	D	
CINSW1837FC52	39- 37	BF		D	
CINSW1859FC51	39- 37	BE		D	
CINSW1873FC51	39- 37	BE	N	D	
CINSZ1839FC51	39- 37	BF		D	
CINSZ1861FC51	39- 37	BE		D	
CINSZ1875FC51	39- 37	BE	N	D	
CINSZ1912FC51	39- 37	BL	N	D	
CLEVP0777FC01	34- 45	AG	N	C	
CPAKA5760FC31	39- 7	BE		D	
CPLTM4027FC08	13- 52	AV		C	
CPLTM4027FC10	13- 52	AT		C	
CPLTM5383FC01	25- 14	AH		C	
CPLTM5388FC01	29- 3	AH		C	
CPLTM5389FC01	13- 43	AP		C	
CPLTM5391FC51	36-901	BC		E	
CPLTM5400FC01	10- 32	AP		C	
CPLTM5401FC02	2- 22	AY		C	
CPLTM5419FC01	30- 8	AH		C	
CPLTM5423FC01	15- 23	AK		C	
CPLTM5431FC03	5- 64	AS		C	
CPLTM5435FC01	6- 33	AR		C	
CPLTM5436FC01	6- 18	AG		C	
CPLTM5443FC02	69- 17	AH		C	
CPLTM5444FC01	68- 6	AM		C	
CPLTM5445FC01	69- 36	AQ		C	
CPLTM5450FC01	70- 13	AH		C	
CPLTM5475FC51	36- 1	AT		E	
CPLTM5491FC01	33- 22	AH		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
CPLTM5628FC01	5- 80	AU		C	
CPLTM5654FC01	13- 52	AN		C	
CPLTM5654FC02	13- 52	AN		C	
CPLTM5668FC01	25- 14	AK	N	C	
CPNLC0237FC02	1- 37	AY		D	
"	3- 28	AY		D	
CPNLC0237FC03	1- 37	AY		D	
"	3- 28	AY		D	
CPNLC0241FC02	1- 37	AY		D	
"	3- 28	AY		D	
CPNLC0242FC02	3- 33	AT		D	
CPNLC0242FC03	3- 33	AU		D	
CPNLC0242FC05	3- 33	AT	N	D	
CPNLC0242FC06	3- 33	AT	N	D	
CPWBF0934FC32	4- 9	AX		E	
CPWBF0975FC52	13- 40	AR		E	
CPWBF0976FC54	13- 12	AR		E	
CPWBF1098FC31	9- 10	AY		E	
CPWBF1107FC52	3- 23	AX		E	
"	49-901	AX		E	
CPWBF1255FC52	3- 29	BF		E	
CPWBF1255FC61	3- 29	BH		E	
"	47-901	BH		E	
CPWBF1256FC31	21- 10	AT		E	
CPWBF1259FC62	3- 13	AY	N	E	
"	48-901	AY	N	E	
CPWBF1279FC52	5- 47	BD		E	
"	51-901	BD		E	
CPWBF1286FC31	54-901	CE		E	
CPWBF1287FC31	10- 42	CE		E	
"	54-901	CE		E	
CPWBF1290FC51	11- 20	BN		E	
"	50-901	BN		E	
CPWBF1291FC51	11- 20	BR		E	
"	50-901	BR		E	
CPWBF1291FC52	11- 20	BR	N	E	
"	50-901	BR	N	E	
CPWBF1294FC32	6- 43	AX		E	
"	52-901	AX		E	
CPWBF1299FC51	17- 15	AL		E	
CPWBF1306FC51	11- 20	BS		E	
"	50-901	BS		E	
CPWBF1307FC32	7- 17	BK		E	
CPWBF1308FC31	7- 21	AR		E	
CPWBF1359FC51	13- 50	BC		E	
CPWBF1364FC51	11- 62	AX		E	
CPWBF1370FC31	7- 17	BK		E	
CPWBF1378FC51	9- 79	AZ		E	
CPWBF1386FC31	10- 42	CA		E	
"	53-901	CA		E	
CPWBF1395FC51	11- 20	BQ		E	
"	50-901	BQ		E	
CPWBF1395FC52	11- 20	BM	N	E	
"	50-901	BM	N	E	
CPWBF1396FC31	6- 52	AP		E	
CPWBN1258FC52	3- 2	CB		E	
CPWBN1258FC54	45-901	BZ		E	
CPWBN1267FC53	10- 12	CB		E	
"	11- 12	CB		E	
"	40-901	CB		E	
CPWBN1318FC52	9- 79	BQ		E	
CPWBN1325FC52	5- 53	DE		E	
CPWBN1325FC54	42-901	DG		E	
CPWBN1326FC51	5- 53	DE		E	
CPWBN1326FC52	42-901	DD		E	
CPWBN1392FC52	5- 53	DC		E	
"	43-901	DC		E	
CPWBN1392FC53	5- 53	DC		E	
"	43-901	DC		E	
CPWBN1393FC51	5- 53	DC		E	
"	43-901	DC		E	
CPWBN1394FC51	3- 2	BW		E	
"	46-901	BW		E	
CPWBN1394FC52	3- 2	BW	N	E	
"	46-901	BW	N	E	
CPWBN1404FC51	5- 53	DB		E	
"	43-901	DB		E	
CPWBN1406FC51	5- 53	DD		E	
"	43-901	DD		E	
CPWBN1414FC51	5- 53	DD	N	E	
"	44-901	DD	N	E	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
CPWBN1415FC51	10- 12	CB	N	E	
"	11- 12	CB	N	E	
"	41-901	CB	N	E	
CPWBN1418FC51	9- 79	BR	N	E	
CPWBN1422FC51	10- 72	BA	N	E	
CRALP0161FC01	9- 30	AT		C	
CREFL0168FC32	6- 7	BR		E	
"	7-901	BR		E	
CREFL0172FC31	6- 7	BQ		E	
"	7-901	BQ		E	
CSFTZ2553FC01	38- 41	AN		C	
CSLi-0057FC32	7- 8	AF		E	
CSLi-0103FC31	8- 7	AF		E	
CSOU-0159FC39	39- 19	BN		E	
CSOU-0159FC40	39- 19	BN		E	
CSOU-0159FC41	39- 19	BP		E	
CSOU-0159FC42	39- 19	BP		E	
CSOU-0164FC32	35-901	BP		E	
CSOU-0164FC33	35-901	BQ		E	
CSPRP2673FC01	6- 6	AG		C	
CTME-0211FC33	13- 38	AY		E	
CTME-0211FC34	13- 38	AZ	N	E	
CYOK-0053FC01	33- 25	AU		D	
"	39- 24	AU		D	
[D]					
DHAi-2049FC11	34- 21	AQ		C	
DHAi-2821FCZZ	3- 17	BA		C	
DHAi-2822FCZZ	9- 14	AS		C	
DHAi-2824FCZZ	5- 39	BB		C	
DHAi-2827FCZZ	12- 18	AL		C	
DHAi-2828FCZZ	28- 2	AR		C	
DHAi-2829FCZZ	26- 25	AW		C	
DHAi-2833FCZZ	13- 31	AT		C	
DHAi-2835FCZZ	33- 15	AG		C	
DHAi-2836FCZZ	23- 24	AP		C	
DHAi-2837FCZZ	16- 12	BA		C	
DHAi-2844FCZZ	9- 36	AF		C	
DHAi-2845FCZZ	22- 33	AG		C	
DHAi-2847FCZZ	18- 36	BD		C	
DHAi-2853FCZZ	50- 1	AD		C	
DHAi-2854FC11	11- 55	AL		C	
DHAi-2858FCZZ	35- 21	AV		C	
DHAi-2859FCZZ	31- 31	AU		C	
DHAi-2860FCZZ	15- 26	AR		C	
DHAi-2862FCZZ	5- 19	AW		C	
DHAi-2865FC11	5- 31	AS		C	
DHAi-2867FCZZ	5- 62	AW		C	
DHAi-2868FCZZ	69- 27	BA		C	
DHAi-2869FCZZ	71- 40	AH		C	
DHAi-2870FCZZ	68- 25	AK		C	
DHAi-2871FCZZ	18- 13	AH		C	
DHAi-2873FCZZ	18- 31	AE		C	
DHAi-2875FCZZ	9- 45	BC		C	
DHAi-2893FCZZ	19- 26	AE		C	
DHAi-2895FCZZ	5- 20	AY		C	
DHAi-2896FC11	9- 59	AY		C	
DHAi-2897FCZZ	23- 14	AD		C	
DHAi-2898FCZZ	11- 5	AF		C	
DHAi-2903FC11	11- 24	AY		B	
DHAi-2903FC16	11- 24	BC		B	
DHAi-2903FC20	11- 24	AT		B	
DHAi-2903FC21	11- 24	AY		B	
DHAi-2903FC22	11- 24	BC		B	
DHAi-2903FC31	11- 24	AX	N	B	
DHAi-2903FCZZ	11- 24	AX		B	
DHAi-2904FCZZ	11- 25	AN		C	
DHAi-2912FC11	7- 15	AW		C	
DHAi-2912FCZZ	7- 22	AW		C	
DHAi-2924FCZZ	5- 61	AY		C	
DHAi-2949FCZZ	3- 30	AF		C	
"	9- 57	AF		C	
DHAi-2950FCZZ	16- 12	BA		C	
DHAi-2951FCZZ	16- 12	BB		C	
DHAi-2952FC11	11- 28	BH		C	
"	29- 23	BH		C	
DHAi-2953FCZZ	3- 25	AV		C	
DHAi-2954FC11	10- 44	BY		C	
DHAi-2959FC11	11- 28	BK		C	
"	29- 23	BK		C	
DHAi-2959FC12	11- 28	BK		C	
"	29- 23	BK		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
DHAi-2970FCZZ	5- 37	AP		C	
DHAi-3024FCZZ	9- 68	AT		C	
DHAi-3026FCZZ	3- 1	AD		C	
DHAi-3037FCZZ	7- 15	AG		C	
DHAi-3060FCZZ	28- 2	AS		C	
DHAi-3062FCZZ	5- 31	AT		C	
DHAi-3066FCZZ	15- 26	AR		C	
DHAi-3068FCZZ	11- 28	BK		C	
"	29- 23	BK		C	
DHAi-3069FCZZ	11- 28	BA		C	
"	29- 23	BA		C	
DHAi-3070FCZZ	10- 44	BY		C	
DHAi-3073FCZZ	16- 12	BA		C	
DHAi-3074FCZZ	16- 12	BB		C	
DHAi-3075FCZZ	16- 12	AP		C	
DHAi-3089FCZZ	11- 28	BG		C	
DHAi-3090FCZZ	10- 44	AP		C	
DHAi-3092FCZZ	11- 28	BL		C	
DHAi-3096FCZZ	16- 12	BA		C	
DHAi-3097FCZZ	11- 28	BK		C	
"	29- 23	BK		C	
DHAi-3098FCZZ	11- 28	BK		C	
"	29- 23	BK		C	
DHAi-3100FCZZ	11- 28	BA	N	C	
"	29- 23	BA	N	C	
DHAi-3101FCZZ	11- 28	BA	N	C	
"	29- 23	BA	N	C	
DHAi-3103FCZZ	10- 44	BT	N	C	
DHAi-3104FCZZ	16- 12	AY	N	C	
DHAi-3105FCZZ	16- 12	BB	N	C	
DHAi-3106FCZZ	16- 12	BB	N	C	
DHAi-3107FCZZ	18- 36	BB	N	C	
DHAi-3108FCZZ	15- 26	AN	N	C	
DHAi-3109FCZZ	5- 39	AQ	N	C	
DHAi-3111FCZZ	5- 19	AT	N	C	
DHAi-3112FCZZ	5- 20	AV	N	C	
DHAi-3113FCZZ	5- 31	AS	N	C	
DHAi-3115FCZZ	19- 26	AH	N	C	
DUNT-6918FC21	39- 19	DC		E	
DUNT-6918FC22	39- 19	DC		E	
DUNT-6923FC11	34-901	BN	N	E	
DUNT-6923FCZZ	34-901	BM		E	
DUNT-6927FCZZ	5- 67	CK		E	
DUNT-6936FC11	39- 20	CK		E	
DUNT-6936FC12	39- 20	CK		E	
DUNT-6946FC11	39- 19	DB		E	
DUNT-6946FC12	39- 19	DC		E	
DUNT-6984FC20	9- 2	CT		E	
DUNT-6984FC21	9- 2	CN		E	
DUNT-6984FC22	9- 2	CL		E	
DUNT-6984FC30	9- 2	CU	N	E	
DUNT-7014FCZZ	5- 67	CF		E	
DUNTW6931FC11	16-901	CC		E	
"	17-901	CC		E	
DUNTW6931FC12	16-901	CC		E	
"	17-901	CC		E	
DUNTW6931FC13	16-901	CB		E	
"	17-901	CB		E	
DUNTW6931FC14	16-901	CB		E	
"	17-901	CB		E	
DUNTW6931FC15	16-901	CC		E	
"	17-901	CC		E	
DUNTW6931FC20	16-901	CB		E	
"	17-901	CB		E	
DUNTW6931FC21	16-901	CB		E	
"	17-901	CB		E	
DUNTW6931FC22	16-901	CC		E	
"	17-901	CC		E	
DUNTW6931FC30	16-901	CC	N	E	
"	17-901	CC	N	E	
DUNTW6931FC31	16-901	CD	N	E	
"	17-901	CD	N	E	
DUNTW6931FC32	16-901	CD	N	E	
"	17-901	CD	N	E	
DUNTW6931FCZZ	16-901	CC		E	
"	17-901	CC		E	
[G]					
GCAB-0889FCZ1	1- 17	AX		D	
GCAB-0890FCZZ	1- 12	AL		D	
GCAB-0891FCZZ	1- 13	AP		D	
GCAB-0892FCZZ	2- 19	AY		D	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
GCAB-0893FCZZ	2- 3	AM		D	
GCAB-0894FCZ4	2- 4	AT		D	
GCAB-0895FCZZ	1- 18	AR		D	
GCAB-0896FCZZ	2- 1	AV		D	
GCAB-0897FCZ3	1- 28	AS		D	
"	4- 12	AS		D	
GCAB-0899FCZ1	18- 21	AX		D	
GCAB-0901FCZZ	2- 5	AW		D	
GCAB-0928FCZZ	18- 21	BA		D	
GCAB-0929FCZZ	2- 19	BB	N	D	
GCAB-0930FCZZ	2- 4	AQ	N	D	
GCAB-0931FCZZ	18- 21	AX	N	D	
GCAB-0932FCZZ	18- 57	AP	N	D	
GCASP0173FCZZ	38- 39	BB		D	
GDOR-0024FCZZ	20- 18	AY		D	
GLEGG0063FCZZ	43- 1	AE		C	
[H]					
HPNLC0241FCZZ	1- 37	AX		D	
"	3- 28	AX		D	
HPNLH0238FCZZ	3- 9	BH		D	
[J]					
JBTN-0240FCZZ	3- 19	AK		C	
JBTN-0243FCGZ	3- 14	AK		C	
JBTN-0243FCZ1	3- 14	AK		C	
JHNDG0151FCZZ	9- 27	AK		C	
JHNDP0096FCGZ	22- 48	AD		C	
JHNDP0110FCZZ	17- 4	AE		C	
JHNDP0143FCZZ	38- 1	AW		C	
JHNDP0144FCZZ	30- 5	AK		C	
JHNDP0145FCZZ	14- 32	AE		C	
JKNBP0121FCZZ	16- 20	AE		C	
JKNBP0136FCGZ	22- 14	AE		C	
JKNBZ0135FCZZ	19- 34	AD		C	
"	69- 32	AD		C	
[L]					
LANGT1395FCZZ	23- 33	AE		C	
LANGT1396FCZZ	69- 43	AC		C	
LANGT1397FCZZ	71- 1	AK		C	
LBNDJ0013FCZ1	3- 26	AA		C	
"	5- 21	AA		C	
"	9- 65	AA		C	
"	11- 58	AA		C	
"	18- 11	AA		C	
"	22- 34	AA		C	
"	23- 40	AA		C	
"	31- 32	AA		C	
"	35- 20	AA		C	
LBNDJ0014FCZ1	10- 67	AB		C	
LBNDJ0043FCZ1	9- 7	AA		C	
"	11- 23	AA		C	
"	13- 42	AA		C	
"	16- 40	AA		C	
"	22- 50	AA		C	
"	23- 15	AA		C	
"	25- 27	AA		C	
"	26- 26	AA		C	
LBNDJ0070FCZZ	1- 9	AD		C	
LBOSZ2011FCZZ	34- 44	AB	N	C	
LBRC-0048FCZ2	34- 24	AQ		C	
LBRC-0048FCZ3	34- 24	AQ		C	
LBSHC0342FCZZ	6- 41	AC		C	
LBSHC0345FCZZ	5- 8	AC		C	
LBSHZ0330FCZZ	16- 35	AP		C	
LBSHZ1102CCZZ	4- 5	AC		C	
LBSHZ2050SCZZ	2- 24	AB		C	
"	6- 34	AB		C	
"	10- 74	AB		C	
LDAiU0450FCZZ	16- 19	AB		C	
LDAiU0572FCZZ	33- 21	AH		C	
LDAiU0576FCZZ	38- 25	AG		C	
LDAiU0580FCZZ	9- 22	AE		C	
LDAiU0581FCZZ	9- 25	AE		C	
LDAiU0582FCZZ	9- 18	AE		C	
LDAiU0583FCZZ	9- 19	AE		C	
LDAiU0584FCZZ	31- 16	AD		C	
LDAiU0587FCZZ	7- 10	AQ		C	
LDAiU0604FCZZ	7- 10	AM		C	
LDAiU0610FCZZ	6- 23	AE		C	
LFiX-0016FCZZ	11- 21	AD		C	
LFiX-0084FCZZ	11- 21	AC		C	
LFiX-0284FCZZ	7- 12	AC		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
LFI X-0284FCZZ	8- 10	AC		C	
LFI X-0441FCZZ	16- 24	AB		C	
LFI X-0442FCZZ	16- 25	AB		C	
LFI X-0516FCZZ	1- 35	AL		C	
LFI X-0537FCZZ	6- 51	AD		C	
LFI X-0538FCZZ	1- 33	AL	N	C	
LFRM-0937FCZZ	10- 4	AN		C	
LFRM-0938FCZZ	11- 2	AL		C	
LFRM-0942FCZZ	24- 5	AF		C	
LFRM-0944FCZZ	28- 12	AE		C	
LFRM-0947FCZZ	27- 12	AE		C	
LFRM-0949FCZZ	29- 18	AL		C	
LFRM-0950FCZZ	13- 21	AX		C	
LFRM-0951FCZZ	23- 36	AT		C	
LFRM-0952FCZZ	16- 17	AS	N	C	
LFRM-0952FCZZ	16- 17	AV		C	
LFRM-0955FCZZ	22- 26	AG		C	
LFRM-0963FCZZ	69- 44	BB		C	
"	70- 18	BB		C	
"	71- 38	BB		C	
LFRM-0965FCZZ	18- 38	AQ		C	
LFRM-0966FCZZ	18- 29	AQ		C	
LFRM-1012FCZZ	29- 18	AL	N	C	
LFRM-1013FCZZ	18- 38	AP	N	C	
LHLDW0734FCZZ	18- 60	AA		C	
LHLDW0910FCZZ	16- 9	AB		C	
LHLDW1019FCZZ	5- 32	AB		C	
LHLDW1057FCZZ	5- 42	AB		C	
"	10- 33	AB		C	
"	17- 14	AB		C	
"	68- 9	AB		C	
LHLDW1061FCZZ	9- 77	AB		C	
"	11- 78	AB		C	
LHLDW1115FCZZ	2- 24	AD		C	
"	5- 1	AD		C	
LHLDW1154FCZZ	10- 75	AC		C	
LHLDW1155FCZZ	1- 48	AC		C	
"	18- 33	AC		C	
LHLDW1178FCZZ	29- 27	AB		C	
LHLDW1226FCZZ	38- 40	AB		C	
"	39- 18	AB		C	
LHLDW1264FCZZ	11- 17	AD		C	
"	11- 79	AD		C	
"	11- 80	AD		C	
LHLDW1334FCZZ	16- 45	AA		C	
LHLDW1388FCZZ	7- 14	AF		C	
LHLDW1418FCZZ	7- 14	AC		C	
LHLDW2106SCZZ	11- 34	AB		C	
LHLDW2341RCZZ	9- 83	AB		C	
LHLDW7005SCZZ	10- 46	AB		C	
LHLDW7011XCZZ	16- 10	AB		C	
LHLDW7076SCZZ	17- 14	AB		C	
"	29- 26	AB		C	
LHLDZ0932FCYZ	36- 11	AD		C	
LHLDZ1085FCZZ	4- 1	AD		C	
LHLDZ1318FCZZ	8- 4	AK		C	
LHLDZ1358FCZZ	32- 15	AD		C	
LHLDZ1359FCZZ	3- 7	AL		C	
LHLDZ1360FCZZ	3- 4	AH		C	
LHLDZ1363FCZZ	9- 29	AD		C	
LHLDZ1364FCZZ	9- 28	AD		C	
LHLDZ1365FCZZ	25- 3	AL		C	
LHLDZ1366FCZZ	25- 18	AL		C	
LHLDZ1367FCZZ	13- 11	AF		C	
LHLDZ1368FCZZ	9- 9	AL		C	
LHLDZ1369FCZZ	36- 10	AP		C	
LHLDZ1370FCZZ	36- 7	AH		C	
LHLDZ1372FCZZ	37- 3	AL		C	
LHLDZ1373FCZZ	37- 8	AK		C	
LHLDZ1374FCZZ	16- 11	AH		C	
LHLDZ1375FCZZ	16- 8	AH		C	
LHLDZ1376FCZZ	10- 35	AL		C	
LHLDZ1377FCZZ	38- 36	AD		C	
LHLDZ1378FCZZ	32- 2	AF		C	
LHLDZ1379FCZZ	32- 3	AF		C	
LHLDZ1380FCZZ	15- 13	AC		C	
LHLDZ1381FCZZ	6- 42	AL		C	
LHLDZ1382FCZZ	8- 9	AR		C	
LHLDZ1384FCZZ	35- 19	AE		C	
LHLDZ1385FCZZ	3- 12	AF		C	
LHLDZ1386FCZZ	17- 13	AK		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
LHLDZ1387FCZZ	7- 19	AH		C	
LHLDZ1417FCZZ	7- 3	AD		C	
LHLDZ1428FCZZ	15- 16	AC	N	C	
LPFTF0096FCZZ	24- 29	AP		C	
LPFTF0097FCZZ	13- 39	AP		C	
LPFTF0101FCZZ	13- 51	AP		C	
LPiN-0026MCZZ	16- 15	AA		C	
"	33- 3	AA		C	
LPiN-0277FCZZ	1- 11	AB		C	
LPiNS0075FCZZ	19- 17	AB		C	
"	23- 4	AB		C	
"	71- 17	AB		C	
LPiNS0096FCZZ	16- 18	AB		C	
"	23- 6	AB		C	
"	24- 3	AB		C	
"	26- 12	AB		C	
"	27- 10	AB		C	
"	29- 13	AB		C	
LPiNS0134FCZZ	31- 8	AB		C	
LPiNS0155FCZZ	26- 3	AA		C	
LPiNS0157FCZZ	24- 40	AB		C	
LPiNS0165FCZZ	34- 51	AB		C	
"	69- 38	AB		C	
LPiNS0255FCZZ	24- 30	AE		C	
LPiNS0263FCZZ	29- 28	AD		C	
LPiNS0278FCZZ	28- 11	AB		C	
LPiNS0292FCZZ	23- 32	AB		C	
LPiNS0297FCZZ	13- 26	AB		C	
LPiNS0317FCZZ	34- 18	AB		C	
LPiNS0319FCZZ	34- 41	AB		C	
LPiNS0320FCZZ	19- 19	AB		C	
"	69- 12	AB		C	
"	71- 23	AB		C	
LPiNS7062SCZZ	38- 43	AA		C	
LPLTK5492FCZZ	38- 4	AE		D	
LPLTK5492FCZZ	38- 4	AE		D	
LPLTM2430FCZZ	15- 14	AC		C	
LPLTM2573FCZZ	1- 6	AD		C	
"	2- 6	AD		C	
LPLTM4057FCZZ	34- 25	AH		C	
LPLTM4057FCZZ	34- 25	AH		C	
"	34- 42	AH		C	
LPLTM4057FCZZ	34- 42	AF		C	
LPLTM4998FCZZ	6- 46	AF		C	
LPLTM5381FCZZ	10- 10	AK		C	
LPLTM5384FCZZ	25- 5	AH		C	
LPLTM5385FCZZ	25- 4	AK		C	
LPLTM5386FCZZ	25- 11	AE		C	
LPLTM5387FCZZ	25- 6	AE		C	
LPLTM5391FCZZ	36- 3	AK		C	
LPLTM5392FCZZ	36- 9	AH		C	
LPLTM5393FCZZ	36- 14	AL		C	
LPLTM5394FCZZ	33- 19	AD		C	
LPLTM5395FCZZ	23- 28	AE		C	
LPLTM5396FCZZ	16- 27	AL		C	
LPLTM5397FCZZ	17- 24	AM		C	
LPLTM5398FCZZ	11- 14	AR		C	
LPLTM5399FCZZ	10- 11	AN		C	
LPLTM5401FCZZ	2- 22	AY		C	
LPLTM5410FCZZ	22- 18	AH		C	
LPLTM5414FCZZ	38- 6	AS		C	
LPLTM5415FCZZ	38- 20	AG		C	
LPLTM5416FCZZ	38- 34	AH		C	
LPLTM5417FCZZ	31- 13	AD		C	
LPLTM5418FCZZ	30- 11	AH		C	
LPLTM5420FCZZ	15- 2	AP		C	
LPLTM5421FCZZ	15- 5	AT		C	
LPLTM5422FCZZ	15- 28	AC		C	
LPLTM5425FCZZ	6- 29	AG		C	
LPLTM5426FCZZ	5- 55	AG		C	
LPLTM5427FCZZ	5- 45	AG		C	
LPLTM5429FCZZ	6- 49	AH		C	
LPLTM5430FCZZ	6- 47	AN	N	C	
LPLTM5430FCZZ	6- 45	AP		C	
LPLTM5434FCZZ	6- 5	AC		C	
LPLTM5447FCZZ	69- 25	AH		C	
LPLTM5451FCZZ	18- 39	AE		C	
LPLTM5457FCZZ	34- 33	AE		C	
LPLTM5463FCZZ	9- 31	AS		C	
LPLTM5467FCZZ	32- 5	AD		C	
LPLTM5470FCZZ	6- 50	AC		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
LPLTM5485FCZZ	5- 56	AE		C	
LPLTM5488FCZ1	5- 40	AD	N	C	
LPLTM5488FCZZ	5- 40	AE		C	
LPLTM5489FCZZ	11- 40	AE		C	
LPLTM5493FCZZ	18- 43	AK		C	
LPLTM5495FCZZ	6- 31	AF		C	
LPLTM5596FCZZ	5- 69	AH		C	
LPLTM5601FCZZ	9- 17	AG		C	
LPLTM5609FCZZ	9- 46	AF		C	
LPLTM5635FCZ1	7- 11	AG		C	
LPLTM5636FCZZ	7- 7	AG		C	
LPLTM5655FCZZ	11- 14	AQ		C	
LPLTM5665FCZZ	10- 48	AH	N	C	
LPLTM5666FCZ1	10- 50	AF	N	C	
LPLTM5666FCZZ	10- 49	AG	N	C	
LPLTM5667FCZZ	10- 11	AP	N	C	
"	10- 69	AP	N	C	
LPLTM5670FCZZ	18- 20	AH	N	C	
LPLTM5671FCZZ	18- 55	AE	N	C	
LPLTM5675FCZZ	11- 26	AF	N	C	
LPLTM5680FCZZ	69- 46	AD		C	
LPLTM5681FCZZ	69- 47	AD		C	
LPLTM5683FCZZ	19- 45	AF	N	C	
LPLTM5684FCZZ	19- 36	AF	N	C	
LPLTM5691FCZZ	69- 46	AD	N	C	
LPLTM5692FCZZ	69- 47	AD	N	C	
LPLTM5694FCZZ	16- 47	AD	N	C	
LPLTM5699FCZZ	16- 47	AF	N	C	
LPLTP1015ACZZ	5- 81	AH		C	
"	9- 84	AH		C	
LPLTP5411FCZZ	38- 13	AQ		C	
LPLTP5412FCZZ	38- 5	AP		C	
LPLTP5413FCZZ	38- 16	AF		C	
LPLTP5453FCZZ	70- 2	AH		C	
LPLTP5454FCZZ	70- 1	AH		C	
LPLTP5455FCZZ	68- 28	AE		C	
LPLTP5456FCZ1	18- 20	AH		C	
LPLTP5472FCZZ	7- 11	AK		C	
LPLTP5473FCZZ	7- 7	AL		C	
LRALM0147FCZZ	9- 48	AQ		C	
LRALM0148FCZ1	23- 20	AL	N	C	
LRALM0148FCZZ	23- 20	AM		C	
LRALM0149FCZZ	9- 24	AG		C	
LRALM0156FCZZ	5- 18	AH		C	
LRALM0157FCZZ	5- 17	AG		C	
LRALM0165FCZZ	13- 24	AF		C	
LRALP0160FCZZ	9- 35	BA		C	
LRALP0162FCZ1	14- 5	AF		C	
LRALP0162FCZZ	14- 5	AG		C	
LSOU-0164FCZZ	35- 5	AU		D	
LSOU-0165FCZ1	35- 23	AU		D	
LSOU-0166FCZZ	35- 15	AS		D	
LSOU-0167FCZZ	35- 22	AU		D	
LSTPF0172FCZZ	16- 39	AA		C	
LSTPF0307FCZZ	16- 34	AB		C	
LSTPP0275FCZZ	20- 22	AE		C	
LSTPP0279FCZZ	31- 24	AB		C	
"	32- 9	AB		C	
"	34- 6	AB		C	
LSTPP0314FCZZ	38- 23	AA		C	
LSTPP0343FCZZ	30- 2	AD		C	
LSTPP0344FCZZ	9- 72	AC		C	
LSTPP0345FCZZ	9- 73	AC		C	
LSTPT0138FCZZ	29- 19	AE		C	
LSTYM0227FCZ1	13- 6	AK		C	
LSTYM0228FCZZ	18- 32	AN		C	
LSTYM0251FCZZ	18- 46	AF		C	
LSTYM0252FCZZ	18- 47	AF		C	
LSTYM0254FCZZ	10- 47	AG	N	C	
LSTYP0229FCZ1	21- 9	AX		C	
LSUPP0060FCZZ	11- 15	AA		C	
"	11- 63	AA		C	
LSUPP0076FCZZ	11- 16	AA		C	
LSUPP0112FCZZ	11- 82	AC		C	
LSUPP0115FCZZ	11- 81	AB		C	
LX-BZ0039FCZZ	6- 10	AB		C	
LX-BZ0049FCZZ	6- 10	AB		C	
LX-BZ0156FCZZ	9- 76	AA		C	
LX-BZ0222FCZZ	5- 54	AA		C	
"	5- 75	AA		C	
LX-BZ0260FCZZ	19- 52	AA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
LX-BZ0266FCZZ	6- 15	AB		C	
LX-BZ0270FCZZ	17- 5	AC		C	
LX-BZ0324FCZZ	6- 14	AA		C	
LX-BZ0335FCZZ	5- 13	AA		C	
"	8- 13	AA		C	
LX-BZ0342FCZZ	16- 42	AB		C	
LX-BZ0465FCZZ	5- 54	AA		C	
"	6- 17	AA		C	
"	19- 51	AA		C	
"	24- 14	AA		C	
LX-BZ0503FCZZ	69- 5	AA		C	
LX-BZ0510FCZZ	9- 43	AB		C	
LX-BZ0529FCZZ	14- 4	AA		C	
LX-BZ0531FCZZ	38- 37	AA		C	
LX-BZ0546FCZZ	37- 51	AC		C	
LX-BZ0576FCZZ	24- 34	AC		C	
"	25- 23	AC		C	
LX-BZ0581FCZZ	12- 3	AB		C	
"	30- 1	AB		C	
LX-BZ0589FCZZ	22- 5	AA		C	
LX-BZ0611FCZZ	13- 20	AB		C	
LX-BZ0618FCZZ	6- 20	AA		C	
"	8- 1	AA		C	
LX-BZ0656FCZZ	13- 44	AD		C	
LX-BZ0670FCZZ	21- 16	AC		C	
"	24- 7	AC		C	
"	25- 26	AC		C	
"	26- 8	AC		C	
"	29- 7	AC		C	
LX-BZ0684FCZZ	9- 90	AB		C	
LX-BZ0711FCZZ	16- 22	AA		C	
LX-BZ0768FCZZ	18- 58	AC		C	
LX-BZ0776FCZZ	4- 23	AG		C	
LX-BZ0780FCZZ	18- 17	AC		C	
"	19- 31	AC		C	
LX-BZ0787FCZZ	39- 10	AH		C	
LX-BZ0823FCZZ	69- 37	AB		C	
"	71- 2	AB		C	
LX-BZ0829FCZZ	27- 14	AB		C	
LX-BZ0833FCZZ	38- 22	AC		C	
LX-BZ0837FCZZ	9- 37	AC		C	
LX-BZ0841FCZZ	9- 26	AD		C	
LX-BZ0842FCZZ	4- 26	AG		C	
LX-BZ0843FCZZ	9- 15	AC		C	
"	28- 1	AC		C	
LX-BZ0844FCZZ	22- 16	AB		C	
LX-BZ0845FCZZ	28- 4	AC		C	
LX-BZ0873FCZZ	17- 3	AC		C	
LX-BZ0884FCZZ	38- 42	AB		C	
LX-BZ0891FCZZ	4- 26	AG		C	
LX-BZ1022LCZZ	5- 66	AB		C	
LX-BZ3008SC0S	23- 38	AA		C	
"	29- 15	AA		C	
LX-BZ4008SC0M	36- 12	AA		C	
LX-BZ5056BCZZ	18- 42	AA		C	
LX-NZ0032FCZZ	42- 1	AA		C	
"	43- 2	AA		C	
"	44- 1	AA		C	
LX-NZ0088FCZZ	1- 46	AC		C	
LX-RZ1017HCZZ	29- 31	AA		C	
LX-WZ0017FCZZ	71- 27	AA		C	
LX-WZ0042FCZ1	71- 45	AA		C	
LX-WZ0042FCZZ	22- 13	AA		C	
LX-WZ0066FCZZ	13- 19	AA		C	
LX-WZ0070FCZZ	22- 10	AA		C	
"	71- 44	AA		C	
LX-WZ0075FCZZ	33- 4	AA		C	
LX-WZ0089FCZZ	24- 42	AB		C	
LX-WZ0112FCZZ	71- 35	AA		C	
LX-WZ0139FCZZ	71- 31	AA		C	
LX-WZ0225FCZZ	14- 33	AA		C	
LX-WZ0227FCZZ	71- 41	AA		C	
LX-WZ0278FCZZ	15- 24	AA		C	
"	15- 35	AA		C	
"	71- 42	AA		C	
LX-WZ0310FCZZ	13- 37	AB		C	
LX-WZ0316FCZZ	69- 45	AA		C	
LX-WZ0325FCZZ	71- 36	AA		C	
LX-WZ0326FCZZ	39- 9	AA		C	
LX-WZ0328FCZZ	19- 14	AA		C	
"	71- 16	AA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
LX-WZ1003HCZZ	8- 3	AA		C	
LX-WZ2028SCZZ	21- 8	AA		C	
“	38- 9	AA		C	
【M】					
MARMP0147FCZ1	4- 7	AL		C	
MARMP0148FCZ1	4- 10	AL		C	
MARMP0151FCZZ	14- 2	AB		C	
MARMP0241FCZZ	20- 2	AC		C	
MARMP0242FCZZ	20- 4	AC		C	
MARMP0243FCZZ	35- 51	AD		C	
MARMP0244FCZZ	31- 30	AD		C	
MARMP0246FCZ1	31- 5	AE		C	
MARMP0247FCZZ	31- 14	AD		C	
MARMP0248FCZZ	32- 25	AE		C	
MARMP0249FCZZ	68- 21	AE		C	
MARMP0250FCZZ	34- 19	AC		C	
MARMP0251FCZZ	20- 6	AD		C	
MARMP0257FCZ1	14- 41	AD	N	C	
MARMP0257FCZZ	14- 42	AD	N	C	
MHNG-0200FCZZ	9- 78	AE		C	
MHNG-0202FCZZ	9- 49	AD		C	
MHNG-0203FCZZ	9- 23	AD		C	
MJNTM0020FCZZ	24- 33	AM		C	
MLEVF0741FCZZ	17- 17	AG		C	
MLEVF0742FCZZ	17- 20	AG		C	
MLEVP0588FCZZ	34- 16	AB		C	
MLEVP0601FCZZ	34- 29	AC		C	
MLEVP0695FCZZ	34- 28	AC		C	
MLEVP0734FCZ1	35- 18	AF		D	
MLEVP0743FCZZ	25- 10	AE		C	
MLEVP0744FCZZ	13- 35	AF		C	
MLEVP0745FCZ1	13- 33	AC		C	
MLEVP0746FCZZ	33- 17	AE		C	
MLEVP0747FCZZ	23- 30	AG		C	
MLEVP0748FCZZ	23- 26	AF		C	
MLEVP0749FCZZ	16- 31	AD		C	
MLEVP0750FCZ1	17- 22	AE		C	
MLEVP0751FCZ1	17- 21	AE		C	
MLEVP0752FCZZ	20- 3	AH		C	
MLEVP0754FCZZ	38- 18	AF		C	
MLEVP0755FCZZ	38- 14	AG		C	
MLEVP0757FCZZ	68- 4	AC		C	
MLEVP0758FCZZ	21- 3	AE		C	
MLEVP0759FCZZ	21- 5	AD		C	
MLEVP0761FCZZ	34- 7	AD		C	
MLEVP0762FCZZ	34- 10	AD		C	
MLEVP0764FCZZ	32- 26	AD		C	
MLEVP0765FCZZ	68- 2	AE		C	
MLEVP0768FCZ1	19- 2	AH		C	
MLEVP0778FCZZ	16- 31	AD	N	C	
MSL i-0132FCZZ	9- 52	AX		C	
MSL i-0133FCZZ	9- 53	AX		C	
MSL i-0138FCZZ	7- 8	AC		C	
MSPRC1312FCZZ	69- 29	AB		C	
MSPRC1943FCZ2	34- 46	AC		C	
MSPRC1954FCZ1	16- 21	AC		C	
MSPRC2114FCZZ	35- 9	AB		D	
MSPRC2345FCZZ	34- 54	AG		C	
MSPRC2378FCZZ	30- 3	AC		C	
MSPRC2382FCZZ	34- 37	AG		C	
MSPRC2589FCZZ	34- 14	AD		C	
MSPRC2603FCZZ	6- 25	AD		C	
MSPRC2604FCZZ	69- 24	AD		C	
MSPRC2605FCZ1	19- 22	AC		C	
MSPRC2612FCZZ	1- 14	AC		C	
MSPRC2613FCZZ	25- 17	AD		C	
MSPRC2614FCZZ	24- 26	AC		C	
MSPRC2615FCZZ	24- 9	AC		C	
MSPRC2616FCZZ	28- 6	AC		C	
MSPRC2617FCZZ	12- 4	AC		C	
MSPRC2618FCZ1	29- 4	AC		C	
MSPRC2619FCZZ	29- 9	AC		C	
MSPRC2620FCZZ	13- 15	AD		C	
MSPRC2622FCZZ	13- 10	AB		C	
MSPRC2623FCZZ	13- 34	AB		C	
MSPRC2624FCZZ	33- 18	AC		C	
MSPRC2625FCZZ	33- 10	AC		C	
MSPRC2627FCZZ	23- 34	AC		C	
MSPRC2628FCZZ	23- 27	AB		C	
MSPRC2629FCZZ	16- 26	AC		C	
MSPRC2630FCZZ	17- 26	AB		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
MSPRC2631FCZZ	17- 19	AC		C	
MSPRC2633FCZZ	21- 4	AB		C	
MSPRC2634FCZZ	20- 8	AB		C	
MSPRC2635FCZZ	20- 5	AB		C	
MSPRC2636FCZZ	21- 6	AB		C	
MSPRC2637FCZZ	20- 15	AC		C	
MSPRC2638FCZZ	22- 3	AC		C	
MSPRC2639FCZZ	22- 36	AB		C	
MSPRC2640FCZZ	38- 15	AC		C	
MSPRC2642FCZ1	38- 26	AB		C	
MSPRC2645FCZZ	32- 16	AB		C	
MSPRC2646FCZZ	31- 15	AB		C	
MSPRC2647FCZZ	32- 30	AB		C	
MSPRC2650FCZZ	31- 29	AB		C	
MSPRC2651FCZZ	69- 41	AB		C	
MSPRC2652FCZZ	71- 34	AC		C	
MSPRC2653FCZZ	68- 5	AC		C	
MSPRC2654FCZ1	68- 22	AB		C	
MSPRC2655FCZZ	19- 24	AB		C	
MSPRC2656FCZZ	19- 6	AC		C	
MSPRC2657FCZZ	18- 1	AB		C	
MSPRC2658FCZZ	34- 14	AC		C	
MSPRC2662FCZZ	9- 44	AB		C	
MSPRC2666FCZZ	18- 7	AC		C	
MSPRC2667FCZZ	18- 9	AC		C	
MSPRC2669FCZZ	38- 33	AB		C	
MSPRC2674FCZZ	34- 34	AC		C	
MSPRC2686FCZZ	30- 10	AC		C	
MSPRC2687FCZZ	20- 14	AB		C	
MSPRC2688FCZZ	22- 40	AC		C	
MSPRC2691FCZZ	68- 12	AB		C	
MSPRC2692FCZZ	16- 28	AB		C	
MSPRC2699FCZZ	34- 17	AC		C	
MSPRC2700FCZZ	22- 27	AB		C	
MSPRC2701FCZZ	68- 23	AC		C	
MSPRC2702FCZZ	71- 37	AC		C	
MSPRC2703FCZ1	22- 49	AD		C	
MSPRC2710FCZZ	21- 23	AD		C	
MSPRC2712FCZZ	22- 41	AC		C	
MSPRC2801FCZZ	17- 19	AD		C	
MSPRC2806FCZZ	17- 19	AD	N	C	
MSPRC2808FCZZ	18- 52	AE	N	C	
MSPRC2809FCZZ	18- 53	AE	N	C	
MSPRC2810FCZZ	17- 19	AD	N	C	
MSPRC2811FCZZ	18- 7	AD	N	C	
MSPRC2812FCZZ	18- 9	AD	N	C	
MSPRC2813FCZZ	24- 26	AD	N	C	
MSPRP1293FCZZ	25- 2	AB		C	
MSPRP1550FCZZ	37- 4	AA		C	
MSPRP1881FCZ1	69- 7	AF		C	
MSPRP2101FCZZ	7- 20	AC		C	
MSPRP2362FCZZ	34- 26	AC		C	
MSPRP2411FCZZ	9- 67	AS		C	
MSPRP2608FCZZ	24- 16	AD		C	
MSPRP2609FCZZ	23- 19	AE		C	
MSPRT0513FCZZ	37- 2	AA		C	
MSPRT0735FCZZ	22- 12	AA		C	
MSPRT1563FCZZ	4- 4	AC		C	
MSPRT1944FCZZ	70- 17	AA		C	
MSPRT2815FCZZ	16- 49	AD	N	C	
MSPRZ7008XCZZ	5- 82	AS		C	
【N】					
NBLTH0153FCZZ	69- 30	AF		B	
“	71- 19	AF		B	
NBLTH0292FCZZ	6- 8	AF		B	
NBLTH0294FCZZ	27- 21	AH		B	
NBLTH0295FCZZ	71- 21	AG		B	
NBLTH0296FCZZ	70- 11	AG		B	
NBLTH0297FCZZ	19- 13	AG		B	
NBLTH0298FCZZ	19- 32	AG		B	
NBLTH0312FCZZ	23- 8	AK		B	
NBLTH0323FCZZ	12- 9	AK		B	
NBLTH0324FCZZ	6- 8	AF		B	
NBLTH0325FCZZ	12- 9	AK	N	B	
NBRGC0037FCZ1	22- 2	AC		C	
NBRGC0066FCZ1	22- 8	AE		C	
NBRGC0133FCZ1	22- 19	AC		C	
“	23- 5	AC		C	
NBRGC0133FCZZ	25- 21	AC		C	
NBRGC0136FCZZ	71- 6	AC		C	
NBRGC0167FCZZ	34- 12	AB		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
NBRGC0249FCZZ	16- 50	AC		C	
NBRGC0387FCZZ	28- 8	AB		C	
"	69- 13	AB		C	
"	71- 15	AB		C	
NBRGC0389FCZ1	15- 33	AE	N	B	
NBRGC0580FCZZ	15- 10	AG		C	
NBRGC0594FCZZ	22- 39	AD		C	
NBRGC0620FCZZ	19- 8	AD		C	
NBRGC0633FCZZ	34- 52	AK	N	C	
NBRGC0634FCZZ	24- 27	AM	N	B	
NBRGC2019SCZZ	26- 4	AC		C	
"	26- 28	AC		C	
"	29- 30	AC		C	
NBRGM0096FCZ1	16- 16	AB		C	
"	19- 10	AB		C	
NBRGM1040HCZZ	29- 29	AC		C	
"	31- 9	AC		C	
"	32- 14	AC		C	
NBRGP0299FCZZ	14- 10	AC		C	
NBRGP0321FCZZ	13- 30	AD		C	
"	33- 5	AD		C	
NBRGP0322FCZZ	13- 25	AC		C	
"	33- 7	AC		C	
NBRGP0549FCZZ	34- 12	AC		C	
NBRGP0573FCZZ	69- 48	AF		C	
NBRGP0588FCZZ	20- 7	AC		C	
NBRGP0589FCZZ	15- 16	AK		C	
NBRGP0616FCZZ	23- 37	AG		C	
"	29- 16	AG		C	
NBRGP0626FCZZ	21- 13	AC		C	
"	38- 30	AC		C	
NBRGY0093FCZZ	24- 27	AK		B	
NBRGY0131FCZZ	29- 10	AM		C	
NBRGY0429FCZZ	19- 38	AN		C	
NBRGY0466FCZZ	6- 30	AK		B	
"	24- 6	AK		B	
"	26- 28	AK		C	
"	27- 8	AK		B	
"	69- 2	AK		B	
NBRGY0513FCZZ	17- 10	AK		B	
NBRGY0592FCZZ	71- 20	AF		B	
NBRGY0599FCZZ	16- 36	AU		C	
NBRGY1032HCZZ	70- 8	AB		B	
NBRGY7014SCZZ	15- 33	AB		B	
NCPL-0007FCZZ	28- 5	AC		C	
NCPL-0031FCZ1	27- 15	AD		C	
NCPL-0032FCZZ	27- 20	AD		C	
NCPL-0033FCZ1	22- 6	AC		C	
NCPL-0040FCZZ	24- 25	AL		C	
NCPL-0044FCZZ	24- 25	BC	N	C	
NFANP0047FCZZ	9- 51	AY		B	
NFANP0048FCZZ	10- 7	AY		B	
"	11- 7	AY		B	
NFANP0049FCZZ	23- 23	AZ		B	
NFANP0051FCZZ	5- 6	BA		B	
NFANP0053FCZZ	9- 3	BA		B	
NFANP0056FCZZ	10- 73	AX		B	
NFANP0060FCZZ	9- 51	AX		B	
NFLY-0007FCZZ	12- 10	AQ		C	
NGERH0066GCZZ	71- 10	AC		C	
NGERH0070FCZZ	26- 21	AD		C	
NGERH0071FCZZ	26- 23	AD		C	
NGERH0111FCZZ	26- 2	AD		C	
"	71- 30	AD		C	
NGERH0128FCZZ	71- 33	AC		C	
NGERH0140FCZZ	27- 2	AC		C	
NGERH0193FCZZ	38- 10	AB		C	
NGERH0209FCZ1	19- 18	AB		C	
NGERH0254FCZZ	71- 8	AC		C	
NGERH0349FCZZ	24- 12	AC		C	
"	26- 14	AC		C	
"	29- 17	AC		C	
NGERH0457FCZZ	26- 9	AC		C	
NGERH0483FCZZ	27- 7	AB		C	
NGERH0493FCZZ	69- 19	AD		C	
NGERH0557FCZZ	69- 34	AC		C	
NGERH0742FCZZ	24- 18	AB		C	
NGERH0755FCZZ	69- 11	AB		C	
NGERH0863FCZZ	16- 14	AB		C	
NGERH0885FCZZ	71- 11	AC		C	
NGERH1062FCZZ	24- 11	AE		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
NGERH1074FCZZ	13- 27	AD		C	
NGERH1214FCZZ	16- 38	AP		C	
NGERH1228FCZZ	70- 7	AD		C	
NGERH1231FCZZ	24- 22	AQ		C	
NGERH1232FCZZ	24- 20	AQ		C	
NGERH1233FCZZ	24- 31	AP		C	
NGERH1234FCZZ	24- 23	AF		C	
NGERH1235FCZZ	24- 24	AF		C	
NGERH1236FCZZ	24- 21	AF		C	
NGERH1237FCZZ	24- 13	AD		C	
NGERH1238FCZZ	24- 8	AD		C	
NGERH1240FCZZ	28- 9	AD		C	
NGERH1241FCZZ	26- 22	AE		C	
NGERH1242FCZZ	26- 20	AF		C	
"	26- 29	AF		C	
NGERH1243FCZZ	26- 19	AF		C	
NGERH1244FCZZ	27- 6	AE		C	
NGERH1245FCZZ	27- 9	AF		C	
NGERH1246FCZZ	27- 17	AE		C	
NGERH1247FCZZ	27- 22	AE		C	
NGERH1248FCZZ	26- 11	AF		C	
NGERH1249FCZZ	29- 12	AD		C	
NGERH1250FCZZ	29- 2	AD		C	
NGERH1251FCZZ	29- 8	AD		C	
NGERH1252FCZZ	29- 5	AD		C	
NGERH1253FCZZ	14- 22	AD		C	
NGERH1254FCZZ	14- 23	AD		C	
NGERH1255FCZZ	14- 20	AD		C	
NGERH1256FCZZ	23- 7	AE		C	
NGERH1258FCZZ	31- 7	AD		C	
NGERH1259FCZZ	31- 10	AD		C	
NGERH1260FCZZ	31- 20	AD		C	
NGERH1261FCZZ	31- 11	AM		C	
"	32- 19	AM		C	
NGERH1262FCZZ	19- 53	AM		C	
"	31- 22	AM		C	
NGERH1263FCZZ	31- 26	AC		C	
"	34- 2	AC		C	
NGERH1266FCZZ	15- 20	AD		C	
NGERH1267FCZZ	15- 21	AD		C	
NGERH1270FCZZ	70- 12	AE		C	
NGERH1274FCZZ	34- 5	AC		C	
NGERH1275FCZZ	34- 9	AM		C	
NGERH1279FCZZ	24- 17	AE		C	
NGERH1282FCZZ	35- 13	AD		D	
NGERH1285FCZZ	19- 18	AL		C	
NGERH1335FCZZ	26- 30	AE		C	
NGERH1336FCZZ	26- 27	AE		C	
NGERH1337FCZZ	26- 19	AF		C	
NGERH1338FCZZ	15- 7	AC		C	
NGERH1339FCZZ	29- 24	AE	N	C	
NGERH1345FCZZ	24- 19	AE		C	
NGERH1346FCZZ	33- 2	AE		C	
NGERH1350FCZZ	34- 50	AD	N	C	
NGERH1351FCZZ	24- 31	AP	N	C	
NGERK1272FCZ1	38- 27	AF		C	
NGERR1230FCZZ	70- 5	AF		C	
NGERR1273FCZZ	35- 11	AD		C	
NPLYZ0146FCZZ	19- 33	AB		C	
NPLYZ0167FCZZ	6- 19	AF		C	
"	8- 2	AF		C	
NPLYZ0181FCZZ	6- 3	AB		C	
NPLYZ0202FCZZ	29- 20	AF		C	
NPLYZ0254FCZZ	19- 16	AD		C	
"	71- 18	AD		C	
NPLYZ0259FCZZ	25- 15	AC		C	
NPLYZ0266FCZZ	25- 28	AC		C	
NPLYZ0278FCZ1	24- 2	AD		C	
NPLYZ0282FCZZ	71- 22	AC		C	
NPLYZ0285FCZ1	27- 13	AE		C	
NPLYZ0336FCZZ	27- 16	AE		C	
NPLYZ0337FCZZ	27- 19	AE		C	
NPLYZ0338FCZZ	6- 9	AN		C	
NPLYZ0339FCZZ	19- 12	AL		C	
NPLYZ0340FCZZ	6- 16	AC		C	
NPLYZ0359FCZZ	6- 11	AM		C	
NPLYZ0360FCZZ	24- 2	AE		C	
NPLYZ0361FCZZ	6- 9	AN		C	
NRÖLi1206FCZZ	17- 11	BG		C	
NRÖLi1286FCZZ	17- 11	BL	N	C	
NRÖLM1207FCZZ	22- 4	AW		C	



PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
NRÖLM1208FCZ1	15- 12	BF		C	
NRÖLM1282FCZZ	15- 12	BF	N	C	
NRÖLN0874FCZZ	16- 48	AK		C	
NRÖLP0512FCZZ	22- 29	AB		C	
NRÖLP0833FCZ1	23- 12	AC		C	
NRÖLP0896FCZZ	18- 5	AC		C	
"	20- 12	AC		C	
"	68- 19	AC		C	
NRÖLP1010FCZZ	23- 3	AC		C	
NRÖLP1210FCZZ	14- 15	AK		C	
NRÖLP1211FCZZ	14- 12	AT		C	
NRÖLP1212FCZZ	15- 22	AS		E	
NRÖLP1213FCZZ	15- 18	AS		E	
NRÖLP1214FCZ1	18- 3	AD		C	
NRÖLR1215FCZZ	21- 14	AS		C	
NRÖLR1216FCZ2	22- 9	AY		C	
NRÖLR1217FCZZ	22- 35	AT		C	
NRÖLR1218FCZZ	34- 8	AL		C	
NRÖLR1219FCZZ	34- 1	AL		C	
NRÖLR1220FCZZ	32- 10	AL		C	
NRÖLR1221FCZZ	69- 14	AQ		C	
NRÖLR1222FCZZ	69- 21	AY		C	
NRÖLR1223FCZ1	71- 14	AS		C	
NRÖLR1224FCZZ	71- 25	AQ		C	
NRÖLR1226FCZZ	19- 20	AQ		C	
NRÖLR1227FCZ1	19- 23	AR		C	
NRÖLR1229FCZZ	34- 32	AL		C	
NRÖLR1240FCZZ	31- 25	AL		C	
NRÖLR1241FCZZ	31- 23	AL		C	
NRÖLR1275FCZZ	69- 21	AY		C	
NRÖLR1284FCZZ	19- 20	AT	N	C	
NRÖLR1285FCZZ	19- 23	BB	N	C	
NRÖLR1291FCZZ	69- 14		N	C	
NRÖLT1228FCZZ	16- 37	BF		C	
NRÖLT1277FCZZ	16- 37	BE		C	
NRÖLT1283FCZZ	16- 37	BG	N	C	
NSFTZ1595FCZZ	30- 4	AD		C	
NSFTZ1765FCZZ	34- 49	AH		C	
NSFTZ1805FCZZ	4- 2	AE		C	
NSFTZ2444FCZZ	6- 13	AL		C	
NSFTZ2445FCZ1	24- 28	AL		C	
NSFTZ2446FCZZ	25- 24	AL		C	
NSFTZ2447FCZ1	24- 10	AL		C	
NSFTZ2448FCZZ	28- 10	AK		C	
NSFTZ2449FCZZ	26- 5	AH		C	
NSFTZ2450FCZZ	26- 10	AK		C	
NSFTZ2451FCZZ	26- 16	AK		C	
NSFTZ2452FCZZ	29- 14	AL		C	
NSFTZ2454FCZZ	26- 13	AH		C	
NSFTZ2455FCZZ	26- 18	AH		C	
NSFTZ2456FCZZ	27- 11	AK		C	
NSFTZ2457FCZZ	26- 17	AH		C	
NSFTZ2458FCZZ	23- 1	AM		C	
NSFTZ2459FCZZ	23- 13	AH		C	
NSFTZ2460FCZZ	23- 35	AP		C	
NSFTZ2461FCZZ	16- 23	AM		C	
NSFTZ2462FCZZ	21- 2	AG		C	
NSFTZ2463FCZ1	21- 18	AG		C	
NSFTZ2464FCZZ	20- 13	AN		C	
NSFTZ2465FCZ1	22- 30	AH		C	
NSFTZ2466FCZZ	38- 29	AR		C	
NSFTZ2467FCZZ	38- 24	AF		C	
NSFTZ2468FCZZ	31- 21	AM		C	
NSFTZ2469FCZZ	32- 17	AL		C	
NSFTZ2471FCZZ	32- 8	AH		C	
NSFTZ2472FCZZ	31- 27	AH		C	
NSFTZ2474FCZZ	69- 23	AL		C	
NSFTZ2475FCZZ	69- 4	AP		C	
NSFTZ2476FCZZ	68- 20	AL		C	
NSFTZ2477FCZZ	70- 4	AG		C	
NSFTZ2480FCZZ	18- 4	AH		C	
NSFTZ2483FCZZ	34- 3	AE		C	
NSFTZ2484FCZZ	34- 39	AF		C	
NSFTZ2491FCZZ	18- 6	AH		C	
NSFTZ2492FCZZ	68- 26	AB		C	
NSFTZ2493FCZ1	32- 29	AH		C	
NSFTZ2501FCZZ	9- 11	AR		C	
NSFTZ2503FCZZ	19- 3	AR		C	
NSFTZ2547FCZZ	34- 13	AP		C	
NSFTZ2555FCZZ	29- 25	AH	N	C	
NSFTZ2556FCZZ	26- 13	AH	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
NSFTZ2557FCZZ	26- 10	AK	N	C	
NSFTZ2558FCZZ	26- 16	AK	N	C	
NSFTZ2559FCZZ	26- 17	AH	N	C	
NSFTZ2560FCZZ	26- 18	AH	N	C	
NSFTZ2562FCZ1	19- 37	AQ	N	C	
NSFTZ2563FCZZ	34- 13	AR	N	C	
NSFTZ2564FCZZ	24- 28	AP	N	C	
NSRW-0028FCZZ	13- 29	AK		C	
NSRW-0029FCZZ	33- 6	AH		C	
【P】					
PBOX-0116FCZZ	15- 29	AU		D	
PBOX-0117FCZZ	14- 28	AZ		C	
PBRSS0192FCZZ	18- 8	AH		B	
PBRSS0196FCZZ	68- 16	AK		B	
PCASZ0285FCZZ	37- 13	AL		C	
PCASZ0286FCZZ	37- 14	AK		C	
PCLC-0277FCZZ	32- 11	AS		B	
PCLC-0286FCZZ	25- 22	AY		B	
PCLC-0287FCZZ	26- 6	AV		B	
PCLC-0288FCZZ	26- 15	AV		B	
PCLC-0289FCZZ	34- 23	AV		B	
PCLC-0290FCZZ	71- 13	AV		B	
PCLC-0291FCZZ	71- 39	AY		B	
PCLC-0295FCZZ	34- 23	AV	N	B	
PCLR-0259FCZZ	22- 11	AB		C	
PCLR-0373FCBZ	34- 38	AD		C	
PCLR-0373FCZZ	34- 53	AC		C	
PCLR-0421FCZ1	69- 22	AF		C	
PCLR-0441FCZZ	9- 38	AK		C	
PCLR-0442FCZZ	21- 17	AD		C	
PCLR-0446FCZZ	19- 15	AD		C	
PCLR-0448FCZZ	71- 43	AE		C	
PCLR-0452FCZZ	24- 39	AE		C	
PCLR-0459FCZZ	24- 39	AF	N	C	
PCÖVP0911FCZ1	4- 21	AC		C	
PCÖVP0941FCZ1	4- 22	AC		C	
PCÖVP1142FCZZ	34- 36	AC		C	
PCÖVP1184FCZ1	13- 13	AC		C	
PCÖVP1266FCGZ	2- 25	AH		D	
PCÖVP1428FCZZ	1- 39	AZ		D	
PCÖVP1429FCZZ	1- 40	AP		D	
PCÖVP1430FCZZ	1- 15	AQ		C	
PCÖVP1431FCZZ	1- 42	AK		D	
PCÖVP1432FCZZ	25- 20	AH		C	
PCÖVP1433FCZZ	13- 1	AP		C	
PCÖVP1436FCZ1	37- 5	AC		C	
PCÖVP1437FCZ1	37- 6	AC		C	
PCÖVP1438FCZZ	14- 7	AT		D	
PCÖVP1439FCZZ	23- 21	AF		C	
PCÖVP1440FCZZ	23- 29	AL		C	
PCÖVP1441FCZZ	17- 2	AZ		C	
PCÖVP1442FCZZ	16- 30	AR		C	
PCÖVP1451FCZZ	38- 2	AH		C	
PCÖVP1452FCZZ	14- 51	AG		D	
"	15- 51	AG		D	
PCÖVP1454FCZ1	5- 4	AN	N	C	
PCÖVP1454FCZZ	5- 4	AP		C	
PCÖVP1456FCZ1	5- 9	AH		C	
PCÖVP1458FCZZ	68- 13	AF		C	
PCÖVP1459FCZZ	68- 11	AK		C	
PCÖVP1460FCZ2	18- 19	AN		C	
PCÖVP1469FCZZ	20- 19	AF		C	
PCÖVP1470FCZ2	5- 68	AR		C	
PCÖVP1508FCZZ	5- 68	AT		C	
PCÖVP1513FCZZ	5- 30	AG		C	
PCÖVP1514FCZZ	18- 48	AH		C	
PCÖVP1518FCZZ	5- 10	AE	N	D	
PCÖVP1523FCZZ	18- 19	AP	N	C	
PCÖVW0829FCZZ	42- 2	AC		C	
"	43- 3	AC		C	
"	44- 2	AC		C	
PCUSF0334FCZZ	7- 18	AP		C	
PCUSG0359FCZZ	20- 21	AC		C	
PCUSG0365FCZZ	18- 49	AD		C	
"	19- 49	AD		C	
PCUSG0366FCZZ	18- 50	AC		C	
"	19- 50	AC		C	
PCUSS0201FCZZ	8- 8	AA		C	
PCUSS1021LCZZ	5- 65	AC		C	
PCUSU0203FCZZ	7- 9	AE		C	
PDUC-0147FCZZ	11- 3	AH		D	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
PDUC-0148FCZZ	9- 54	AW		D	
PDUC-0149FCZZ	9- 58	AR		D	
PDUC-0150FCZZ	11- 6	AL		D	
PDUC-0151FCZZ	9- 69	AG		D	
PDUC-0160FCZZ	10- 51	AP	N	C	
PFI LD0263FCZZ	11- 37	AL		B	
PFI LW0264FCZZ	2- 15	AD		C	
PFI LZ0265FCZ1	9- 62	BA		B	
PFI LZ0280FCZ1	10- 52	BC	N	C	
PFTA-0117FCZZ	14- 1	AE		C	
PFTA-0118FCZZ	14- 3	AE		C	
PFTA-0119FCZZ	14- 1	AE		C	
PFTA-0120FCZZ	14- 3	AE		C	
PFTA-0124FCZZ	14- 3	AE		C	
PFTA-0126FCZZ	14- 3	AE		C	
PFTA-0135FCZZ	2- 20	AE		D	
PGIDH0816FCZZ	6- 23	AC		C	
PGIDH1782FCZ1	33- 12	AQ		C	
PGIDH1783FCZZ	23- 10	AM		C	
PGIDH1784FCZZ	17- 9	AK		C	
PGIDH1785FCZZ	22- 31	AM		C	
PGIDH1786FCZZ	22- 24	AF		C	
PGIDH1787FCZZ	22- 38	AM		C	
PGIDH1788FCZZ	22- 37	AM		C	
PGIDH1789FCZZ	22- 47	AH		C	
PGIDH1790FCZ1	22- 23	AF		C	
PGIDH1792FCZZ	5- 58	AF		C	
PGIDH1793FCZZ	5- 52	AG		C	
PGIDH1794FCZZ	68- 29	AM		C	
PGIDH1795FCZZ	68- 15	AF		C	
PGIDH1796FCZ1	18- 30	AL		C	
PGIDH1797FCZZ	18- 10	AP		C	
PGIDH1833FCZZ	38- 11	AC		C	
PGIDH1879FCZZ	18- 10	AQ	N	C	
PGIDH1881FCZZ	17- 24	AN	N	C	
PGIDM1344FCZZ	34- 47	AM		C	
PGIDM1799FCZZ	37- 12	AL		C	
PGIDM1800FCZZ	12- 17	AK		C	
PGIDM1802FCZZ	21- 20	AK		C	
PGIDM1803FCZZ	21- 1	AK		C	
PGIDM1804FCZZ	20- 9	AQ		C	
PGIDM1805FCZZ	20- 17	AR		C	
PGIDM1806FCZZ	35- 1	AE		C	
PGIDM1807FCZZ	35- 2	AE		C	
PGIDM1808FCZZ	31- 18	AG		C	
PGIDM1809FCZZ	31- 4	AF		C	
PGIDM1810FCZZ	32- 23	AP		C	
PGIDM1811FCZZ	32- 28	AG		C	
PGIDM1812FCZZ	68- 17	AY		C	
PGIDM1814FCZZ	69- 9	AQ		C	
PGIDM1816FCZZ	19- 25	AQ		C	
PGIDM1817FCZZ	19- 21	AR		C	
PGIDM1818FCZ1	19- 28	AK		C	
PGIDM1819FCZ1	19- 30	AQ		C	
PGIDM1825FCZ1	34- 30	AN		C	
PGIDM1827FCZZ	12- 14	AH		C	
PGIDM1837FCZZ	18- 41	AC		C	
PGIDM1839FCZZ	16- 41	AQ		C	
PGIDM1873FCZ1	1- 29	AG	N	C	
PGIDM1874FCZZ	19- 28	AL	N	C	
PGIDM1875FCZZ	19- 30	AR	N	C	
PGIDM1877FCZZ	19- 44	AV	N	C	
PGIDM1878FCZZ	19- 43	AF	N	C	
PGIDM1880FCZZ	18- 54	AA	N	C	
PGIDM1882FCZZ	16- 30	AP	N	C	
PGIDW1824FCZZ	35- 14	AC		C	
PGLSP0074FCZ8	1- 34	BK		B	
PGLSP0092FCZZ	5- 22	AV		B	
PGLSP0100FCZZ	1- 34	AZ	N	B	
PGLSP0101FCZZ	1- 26	AS	N	B	
PGSK-0016FCZZ	6- 38	AG		C	
PGSK-0026FCZZ	6- 35	AG		C	
PGSK-0027FCZZ	6- 36	AX		C	
PGSK-0028FCZZ	6- 32	AF		C	
//	11- 64	AF		C	
PGSK-0030FCZZ	5- 77	AH		C	
PGSK-1002LCZZ	2- 52	AC		C	
//	6- 48	AC		C	
PGSK-2016HCZZ	5- 57	AR		C	
PGUMS0147FCZZ	5- 28	AA		C	
PGUMS0182FCZZ	9- 33	AC		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
PGUMS0228FCZZ	5- 25	AA		C	
PGUMS0273FCZZ	5- 26	AB		C	
PGUMS0281FCZZ	5- 26	AB	N	C	
PHOG-0346FCZZ	11- 57	AB		C	
PHOG-1023CCZZ	11- 24	AB		C	
PHOG-7004SCZZ	16- 44	AD		C	
PKAi-1080CESA	1- 16	AE		C	
PMAGT0015FCZZ	1- 41	AD		B	
PMAGT0072FCZZ	9- 41	AF		B	
PMAGT0088FCZZ	35- 10	AF		B	
PMiR-0155FCZZ	8- 12	AP		B	
PMiR-0156FCZZ	7- 13	AS		B	
PMiR-0159FCZZ	7- 13	AS		B	
PMLT-1132FCZZ	14- 26	AC		C	
PMLT-1133FCZZ	14- 24	AC		C	
PMLT-1134FCZZ	14- 25	AC		C	
PMLT-1136FCZZ	14- 9	AC		C	
PMLT-1137FCZZ	14- 36	AB		C	
PMLT-1141FCZZ	14- 35	AC		C	
PMLT-1142FCZZ	14- 30	AD		C	
PMLT-1145FCZZ	14- 31	AA		C	
PMLT-1154FCZZ	15- 32	AA		C	
PMLT-1161FCZ1	13- 49	AD		C	
PMLT-1162FCZ1	13- 48	AD		C	
PMLT-1163FCZZ	13- 7	AC		C	
PMLT-1167FCZZ	20- 24	AF		C	
PMLT-1168FCZZ	20- 25	AB		C	
PMLT-1169FCZZ	20- 26	AC		C	
PMLT-1184FCZZ	14- 37	AA		C	
PMLT-1189FCZZ	14- 27	AD		C	
PMLT-1191FCZZ	20- 27	AC		C	
PMLT-1192FCZZ	20- 28	AC		C	
PMLT-1225FCZZ	19- 39	AC	N	C	
PMLT-1226FCZZ	19- 40	AC	N	C	
PMLT-1227FCZZ	19- 41	AC	N	C	
PPiPP0197FCZZ	13- 17	AF		C	
PPiPP0198FCZZ	33- 8	AS		C	
PPiPP0199FCZZ	32- 18	AD		C	
PPiPP0200FCZZ	39- 46	AN		C	
PRDAF0071FCZZ	50- 2	AK		C	
PREFL0168FCZZ	7- 5	AP		C	
PREFL0172FCZZ	7- 5	AK		C	
PRNG-0100FCZZ	15- 17	AD		C	
PRNGP0015FCZZ	15- 11	AF		C	
PRNGP0077FCZZ	20- 23	AA		C	
//	21- 12	AA		C	
PRNGP0081FCZZ	35- 52	AA		C	
PRNGP0096FCZZ	15- 11	AK		C	
PSEL-0749FCZ1	13- 23	AG		C	
PSEL-0750FCZ1	13- 22	AG		C	
PSEL-0751FCZZ	14- 11	AC		C	
PSEL-0753FCZZ	23- 9	AC		C	
PSEL-0754FCZ2	15- 31	AE		C	
PSEL-0755FCZ2	15- 30	AE		C	
PSEL-0763FCZZ	14- 8	AG		C	
PSEL-0764FCZZ	9- 60	AE		C	
PSEL-0765FCZZ	9- 61	AE		C	
PSEL-0785FCZZ	15- 36	AG	N	C	
PSEL-0787FCZ1	14- 8	AF	N	C	
PSHEP0293GCZZ	43- 4	AB		C	
PSHEP1804FCZZ	11- 59	AB		C	
PSHEP2340FCZZ	70- 9	AA		C	
PSHEP4529FCZZ	11- 18	AD		C	
PSHEP4546FCZZ	6- 40	AE		C	
PSHEP4547FCZZ	5- 27	AB		C	
PSHEP4549FCZZ	69- 33	AC		C	
PSHEP4553FCZZ	3- 8	AQ		C	
PSHEP4554FCZZ	3- 8	AQ		C	
PSHEP4604FCZZ	2- 23	AE		C	
PSHEP4617FCZZ	15- 34	AD		C	
PSHEP4626FCZZ	21- 26	AE		C	
PSHEP4655FCZZ	9- 64	AC		C	
PSHEP4664FCZZ	37- 15	AD		C	
PSHEP4666FCZZ	9- 16	AC		C	
PSHEP4667FCZZ	68- 30	AD		C	
PSHEP4672FCZZ	9- 91	AC		C	
PSHEP4675FCZZ	5- 78	AC		C	
PSHEP4676FCZZ	5- 86	AD		C	
PSHEP4681FCZZ	3- 34	AC		C	
PSHEP4682FCZZ	7- 16	AE		C	
PSHEP4684FCZZ	7- 4	AC		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
PSHEP4718FCZ1	3- 8	AQ	N	C	
PSHEP4719FCZ1	3- 8	AQ	N	C	
PSHEP4720FCZZ	9- 88	AD		C	
"	11- 54	AD		C	
PSHEP4721FCZZ	9- 89	AD		C	
PSHEP4722FCZZ	15- 19	AC		C	
PSHEP4784FCZZ	3- 38	AB	N	C	
PSHEP4786FCZZ	11- 77	AD	N	C	
PSHEP4800FCZZ	22- 55	AC	N	C	
PSHEZ1394FCZZ	39- 35	AC		D	
PSHEZ2097FCZZ	39- 3	AF		C	
PSHEZ3130FCZZ	38- 7	AB		C	
PSHEZ4513FCZZ	5- 29	AB		C	
"	5- 36	AB		C	
PSHEZ4518FCZZ	14- 18	AG		C	
PSHEZ4519FCZZ	14- 17	AG		C	
PSHEZ4520FCZ1	22- 22	AE		C	
PSHEZ4521FCZZ	22- 25	AF		C	
PSHEZ4523FCZZ	15- 3	AB		C	
PSHEZ4524FCZZ	32- 22	AC		C	
PSHEZ4525FCZZ	32- 21	AC		C	
PSHEZ4530FCZZ	8- 11	AD		C	
PSHEZ4555FCZZ	3- 27	AH		C	
"	39- 41	AH		C	
PSHEZ4556FCZZ	3- 27	AH		C	
"	39- 41	AH		C	
PSHEZ4557FCZZ	3- 27	AH		C	
"	39- 41	AH		C	
PSHEZ4558FCZZ	3- 27	AH		C	
PSHEZ4559FCZZ	3- 27	AH		C	
PSHEZ4560FCZZ	3- 27	AH		C	
PSHEZ4561FCZZ	3- 27	AH		C	
PSHEZ4562FCZZ	3- 37	AE		C	
"	39- 41	AE		C	
PSHEZ4563FCZZ	3- 37	AE		C	
"	39- 41	AE		C	
PSHEZ4564FCZZ	3- 37	AE		C	
"	39- 41	AE		C	
PSHEZ4565FCZZ	3- 37	AE		C	
"	39- 41	AE		C	
PSHEZ4566FCZZ	3- 37	AE		C	
PSHEZ4567FCZZ	3- 37	AE		C	
PSHEZ4568FCZZ	3- 37	AE		C	
PSHEZ4605FCZZ	9- 55	AK		C	
PSHEZ4616FCZZ	30- 13	AP		C	
PSHEZ4618FCZZ	18- 44	AN		C	
PSHEZ4629FCZZ	9- 85	AC		C	
PSHEZ4656FCZZ	9- 86	AC		C	
PSHEZ4668FCZZ	9- 92	AC		C	
PSHEZ4677FCZZ	5- 79	BF		C	
PSHEZ4685FCZZ	5- 76	AG		C	
PSHEZ4703FCZZ	3- 27	AK		C	
"	39- 41	AK		C	
PSHEZ4704FCZZ	3- 27	AK		C	
"	39- 41	AK		C	
PSHEZ4705FCZZ	3- 27	AK		C	
"	39- 41	AK		C	
PSHEZ4706FCZZ	3- 27	AK		C	
"	39- 41	AK		C	
PSHEZ4707FCZZ	39- 41	AK		C	
PSHEZ4708FCZZ	39- 41	AK		C	
PSHEZ4709FCZZ	39- 41	AK		C	
PSHEZ4710FCBZ	3- 37	AE	N	C	
"	39- 41	AE	N	C	
PSHEZ4710FCZZ	3- 37	AE		C	
"	39- 41	AE		C	
PSHEZ4711FCBZ	3- 37	AE	N	C	
"	39- 41	AE	N	C	
PSHEZ4711FCZZ	3- 37	AE		C	
"	39- 41	AE		C	
PSHEZ4712FCBZ	3- 37	AE	N	C	
"	39- 41	AE	N	C	
PSHEZ4712FCZZ	3- 37	AE		C	
"	39- 41	AE		C	
PSHEZ4713FCBZ	3- 37	AE	N	C	
"	39- 41	AE	N	C	
PSHEZ4713FCZZ	3- 37	AE		C	
"	39- 41	AE		C	
PSHEZ4714FCBZ	39- 41		N	C	
PSHEZ4714FCZZ	39- 41	AE		C	
PSHEZ4715FCBZ	39- 41	AE	N	C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
PSHEZ4715FCZZ	39- 41	AE		C	
PSHEZ4716FCBZ	39- 41	AE	N	C	
PSHEZ4716FCZZ	39- 41	AE		C	
PSHEZ4726FCZZ	3- 27	AH		C	
"	39- 41	AH		C	
PSHEZ4727FCZZ	3- 27	AH		C	
"	39- 41	AH		C	
PSHEZ4728FCZZ	3- 27	AH		C	
"	39- 41	AH		C	
PSHEZ4729FCZZ	3- 27	AH		C	
"	39- 41	AH		C	
PSHEZ4730FCZZ	3- 27	AH		C	
PSHEZ4731FCZZ	3- 27	AH		C	
PSHEZ4732FCZZ	3- 27	AH		C	
PSHEZ4762FCZZ	19- 42	AA		C	
PSHEZ4769FCZZ	22- 54	AC		C	
PSHEZ4770FCZZ	1- 53	AF	N	C	
PSHEZ4771FCZZ	5- 36	AB	N	C	
PSHEZ4774FCZZ	70- 19	AC	N	C	
PSHT-0074FCZZ	13- 16	AF		C	
PSHT-0075FCZZ	33- 9	AF		C	
PSHT-0087FCZZ	14- 39	AD	N	C	
PSLDH0178FCZZ	4- 8	AD		C	
PSPAZ1410FCZZ	18- 34	AB		C	
PSPAZ1413FCZZ	42- 3	AC		C	
"	43- 5	AC		C	
"	44- 3	AC		C	
PSPAZ1415FCZZ	5- 70	AC		C	
PTME-0168FCZZ	16- 29	AF		C	
PTME-0174FCZ1	17- 25	AG		C	
PTME-0225FCZZ	13- 36	AC		C	
PTME-0269FCZZ	19- 5	AD		C	
PTME-0271FCZZ	35- 8	AD		C	
PTME-0272FCZZ	38- 35	AG		C	
PTME-0273FCZZ	38- 38	AG		C	
PTME-0277FCZZ	14- 40	AC	N	C	
PTME-0278FCZZ	16- 46	AM	N	C	
PTPE-0243FCZZ	38- 12	AD		C	
PTPE-0248FCZZ	6- 39	AF		C	
PTPE-0251FCZZ	1- 49	AD		C	
PTPE-0257FCZZ	6- 54	AC		C	
PTUBP0129FCZZ	19- 35	AC		C	
PWiR-0186FCZZ	6- 1	AS		C	
PWiR-0188FCZZ	37- 1	AM	N	B	
[Q]					
QACCE7422QCZZ	11- 24	BB		B	
QACCJ3410QCZZ	11- 24	AS		B	
QACCL8421QCN1	11- 24	AX		B	
QACCV6420QCN2	11- 24	AU		B	
QCNCM0542FCZZ	52- 1	AC		C	
QCNCM0672FCZZ	50- 3	AB		C	
QCNCM0895FCZZ	50- 4	AG		C	
QCNCM0923FC16	41- 2	AF		C	
QCNCM0923FC3D	41- 3	AF		C	
QCNCM0964FCZZ	40- 2	AG		C	
QCNCM0965FCZZ	40- 3	AG		C	
QCNCM0966FCZZ	40- 4	AG		C	
QCNCM0967FCZZ	40- 5	AG		C	
QCNCM0972FCZZ	42- 4	AH		C	
"	43- 6	AH		C	
"	44- 4	AH		C	
QCNCM0974FCZZ	42- 5	AK		C	
"	43- 7	AK		C	
"	44- 5	AK		C	
QCNCM0976FCZZ	47- 1	AD		C	
QCNCM0977FCZZ	47- 2	AF		C	
"	48- 1	AF		C	
QCNCM0978FCZZ	48- 2	AF		C	
QCNCM0979FCZZ	45- 2	AF		C	
"	46- 2	AF		C	
QCNCM0980FCZZ	45- 3	AF		C	
"	46- 3	AF		C	
QCNCM0981FCZZ	45- 4	AF		C	
"	46- 4	AF		C	
QCNCM0982FCZZ	45- 5	AF		C	
"	46- 5	AF		C	
QCNCM0983FCZZ	45- 6	AF		C	
"	46- 6	AF		C	
QCNCM0984FCZZ	45- 7	AD		C	
"	46- 7	AD		C	
QCNCM0985FCZZ	45- 8	AE		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
QCNCM0985FCZZ	46- 8	AE		C	
QCNCM0989FCZZ	50- 5	AG		C	
QCNCM0990FCZZ	42- 6	AE		C	
"	43- 8	AE		C	
"	44- 6	AE		C	
QCNCM0991FCZZ	42- 7	AG		C	
"	43- 9	AG		C	
"	44- 7	AG		C	
QCNCM0996FCZZ	40- 6	AF		C	
QCNCM0997FCZZ	47- 3	AD		C	
QCNCM0998FCZZ	42- 8	AF		C	
"	43- 10	AF		C	
"	44- 8	AF		C	
QCNCM0999FCZZ	11- 9	AC		C	
QCNCM1000FCZZ	9- 87	AC		C	
QCNCM1015FCZZ	42- 9	AG		C	
"	43- 11	AG		C	
"	44- 9	AG		C	
QCNCM1043FCZZ	10-100	AK	N	C	
QCNCM1044FCZZ	41- 4	AL	N	C	
QCNCM1045FCZZ	41- 5	AN	N	C	
QCNCM7014SC0F	51- 1	AB		C	
QCNCM7014SC0i	40- 7	AB		C	
QCNCM7014SC1C	40- 8	AC		C	
"	51- 2	AC		C	
QCNCW0382FCZZ	40- 9	AE		C	
"	41- 6	AE		C	
QCNCW0399FCZZ	49- 1	AB		C	
QCNCW0458FCZZ	50- 6	AD		C	
QCNCW0759FCZZ	49- 2	AC		C	
QCNCW0885FCZZ	40- 10	AG		C	
"	41- 7	AG		C	
QCNCW0948FCZ3	51- 3	AC		C	
QCNCW1020FCZZ	42- 10	AF		C	
"	43- 12	AF		C	
"	44- 10	AF		C	
QCNCW1046FCZZ	44- 11	AK	N	C	
QCNCW7036XC5J	10-101	AP		C	
"	42- 11	AP		C	
"	43- 13	AP		C	
QCNCW7191RC1B	45- 10	AG		C	
"	46- 10	AG		C	
QCNW-0001QCZZ	11- 24	AN		C	
QCNW-0160FCZZ	5- 15	AE		C	
QCNW-0161FCZZ	5- 16	AF		C	
QEARP0097FCZZ	3- 6	AD		C	
QEARP0109FCZZ	69- 49	AD		C	
QEARZ7013XCZZ	5- 83	AP		C	
QFS-B0030FCZZ	50- 10	AH		A	
QFS-C1500QCZZ	50- 10	AF		A	
QFSDH0026FCZZ	50- 13	AC		C	
QPLGA0001QCZZ	11- 24	AN		B	
QPLGA0003QCZZ	11- 24	AN		B	
QPLGA4171CCZZ	11- 24	AN		B	
QSLP-0190FCZZ	36- 8	AE		C	
QSLP-0191FCZZ	36- 6	AE		C	
QSLP-0193FCZZ	37- 9	AF		C	
QSÖCZ0070FCZZ	42- 12	AN		C	
"	43- 14	AN		C	
QSÖCZ0071FCZZ	40- 11	AP		C	
"	45- 11	AP		C	
"	46- 11	AP		C	
QSÖCZ0072FCZZ	42- 13	AL		C	
"	43- 15	AL		C	
QSÖCZ0073FCZZ	41- 8	AL		C	
"	44- 12	AL		C	
QSÖCZ6428ACZZ	42- 14	AE		C	
"	43- 16	AE		C	
"	44- 13	AE		C	
QSW-L0515FCZZ	35- 16	AR		B	
QSW-M0319FCZZ	9- 39	AG		B	
QSW-M0502FCZZ	3- 10	AH		B	
QSW-M0518FCZZ	18- 25	AH		B	
QSW-P0465FCZZ	47- 4	AC		B	
"	48- 3	AC		B	
QSW-P0469FCZZ	47- 5	AD		B	
QSW-P0506FCZZ	19- 27	AP		B	
"	22- 32	AP		C	
QSW-Z0507FCZZ	18- 12	AP		B	
"	19- 27	AP		B	
QSW-Z0514FCZZ	31- 19	AP		B	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
QSW-Z0516FCZZ	68- 24	AP		B	
"	69- 26	AP		B	
QSW-Z1390QCZZ	3- 24	BA		B	
QTANN0015FCZZ	11- 61	AG		C	
QTANP0115FCZZ	50- 14	AB		C	
"	50- 16	AB		C	
QTANP0116FCZZ	50- 15	AA		C	
QTANP0189FCZZ	50- 16	AC		C	
QTANZ0206FCZZ	25- 19	AF		C	
【R】					
RALMB1002LCZZ	47- 6	AE		C	
RC-KZ1054CCN2	42- 15	AB		C	
"	43- 17	AB		C	
"	44- 14	AB		C	
RC-KZ2005SCZZ	52- 2	AA		C	
RC-QZ0314FCZZ	50- 17	AH		C	
RC-QZ0358FCZZ	49- 3	AF		C	
RCiLF0031FCZZ	50- 18	AR		C	
RCiLF0068FCZZ	49- 4	AF		C	
RCiLF0080FCZZ	42- 16	AC		C	
"	43- 18	AC		C	
"	44- 15	AC		C	
RCiLF0096FCZZ	50- 19	AN		C	
RCiLF0099FCZZ	11- 65	AY		C	
RCiLF0104FCZZ	11- 56	AS	N	C	
RCÖRF0015FCZZ	5- 35	AK		C	
RCÖRF0029FCZZ	3- 31	AN		C	
RCÖRF0030FCZZ	5- 34	AM		C	
RCÖRF0031FCZZ	11- 50	AT		C	
RCÖRF0032FCZZ	5- 38	AL		C	
RCÖRF0034FCZZ	18- 51	AR		C	
RCÖRF0035FCZZ	5- 87	AM		C	
RCÖRF0037FCZZ	3- 36	AS		C	
RCÖRF1036ACZZ	3- 31	AP		C	
RCÖRF1039LCZZ	11- 68	AN		C	
RCÖRF5010BCZZ	5- 84	AD		C	
RCÖRF6661RCZZ	3- 35	AK		C	
RCÖRF6693RCZZ	5- 85	AK		C	
RCRMC1003YCZZ	45- 12	AG		B	
"	46- 12	AG		B	
RCRS-0007FCZZ	47- 7	AD		B	
RCRS-0010FCZZ	40- 12	AK		B	
"	41- 9	AK		B	
RCRS-0012FCZZ	42- 17	AU		B	
RCRS-0028FCZZ	42- 18	AQ		B	
RCRS-0032FCZZ	46- 13	AH		B	
RCRS-0038FCZZ	42- 19	AQ		B	
RCRS-0040FCZZ	42- 20	AS		C	
RCRS-0045FCZZ	45- 13	AE		B	
RCRS-0049FCZZ	43- 19	AP		B	
RCRS-0050FCZZ	43- 19	AP		B	
RCRS-0051FCZZ	43- 20	AP		B	
RCRS-0052FCZZ	43- 20	AP		B	
RCRS-0053FCZZ	43- 21	AP		B	
RCRS-0054FCZZ	43- 21	AP		B	
RCRS-0055FCZZ	43- 22	AP		B	
"	44- 16	AP		B	
RCRS-0056FCZZ	43- 23	AP		B	
"	44- 17	AP		B	
RCRS-0059FCZZ	44- 18	AP	N	B	
RCRS-0063FCZZ	44- 19	AP	N	B	
RCRSP6676RCZZ	42- 21	AG		C	
"	43- 24	AG		B	
"	44- 20	AG		B	
RCRSQ6011SCZZ	42- 22	AS		B	
RCRSZ1062ACZZ	42- 23	AS		B	
RDTCT0134FCZZ	16- 3	AR		B	
RDTCT0135FCZZ	16- 2	AR		B	
RDTCT0136FCZZ	15- 27	AY		C	
RDTCT0145FCZZ	16- 2	AQ	N	B	
RFiLF0031FCZZ	45- 14	AD		B	
"	46- 14	AD		B	
RFiLN6012RCZZ	43- 25	AB		B	
"	44- 21	AB		B	
RFiLN6013RCZZ	43- 26	AB		B	
"	44- 22	AB		B	
RFiLZ0028FCZZ	42- 24	AD		B	
"	43- 27	AD		B	
"	44- 23	AD		B	
RFiLZ0032FCZZ	42- 25	AD		B	
"	43- 28	AD		B	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
RFILZ0032FCZZ	44- 24	AD		B	
RFILZ1029LCZZ	43- 27	AE		B	
RFILZ1032LCZZ	43- 28	AE		B	
RH-DZ0019FCZZ	50- 20	AG		B	
RLMPD0619FCZZ	7- 1	BL		B	
RLMPD0638FCZZ	7- 1	BL		B	
RLMPU0617FCZZ	16- 33	AZ		B	
RLMPU0618FCZZ	16- 32	AZ		B	
RLMPU0624FCZZ	16- 33	AZ		B	
RLMPU0628FCZZ	16- 33	BA		B	
RLMPU0630FCZZ	16- 32	AZ		B	
RLMPU0634FCZZ	16- 32	BA		B	
RLMPU0640FCZZ	16- 33	AZ		B	
RLMPU0641FCZZ	16- 32	AZ		B	
RLMPU0642FCZZ	16- 33	AZ		B	
RLMPU0643FCZZ	16- 32	AZ		B	
RLMPU0652FCZZ	16- 33	AZ	N	B	
RLMPU0653FCZZ	16- 32	AZ	N	B	
RLMPU0654FCZZ	16- 33	AZ	N	B	
RLMPU0655FCZZ	16- 32	AZ	N	B	
RMOTD0826FCZZ	14- 21	AX		B	
RMÖTP0566FCZZ	70- 14	AV		B	
RMÖTP0827FCZZ	12- 13	BR		B	
RMÖTP0829FCZZ	6- 27	BP		B	
RMÖTP0830FCZZ	18- 56	AY		B	
"	69- 16	AY		B	
RMÖTP0849FCZZ	12- 13	BR		B	
RMÖTP0851FCZZ	12- 13	BR	N	B	
RMPTA0031FCZZ	50- 21	AE		B	
RMPTC3272QCJB	52- 3	AA		B	
RMPTC4220QCJJ	44- 25	AC		B	
RMPTC7103QCJB	51- 4	AB		B	
RMPTC8103QCJB	51- 5	AC		B	
RMPTM0034FCZZ	42- 26	AC		B	
"	43- 29	AC		B	
"	44- 26	AC		B	
RMPTW4103QCJJ	40- 13	AB		B	
"	41- 10	AB		B	
"	45- 15	AB		B	
"	46- 15	AB		B	
RMPTW4122QCJJ	40- 14	AB		B	
"	41- 11	AB		B	
"	45- 16	AB		B	
"	46- 16	AB		B	
RMPTW4222QCJJ	40- 15	AB		B	
"	41- 12	AB		B	
"	45- 17	AB		B	
"	46- 17	AB		B	
RMPTW4334QCJJ	45- 18	AB		B	
"	46- 18	AB		B	
RMPTW4470QCJJ	45- 19	AB		B	
"	46- 19	AB		B	
RMPTW4472QCJJ	40- 16	AB		B	
"	41- 13	AB		B	
RMPTW4683QCJJ	45- 20	AB		B	
"	46- 20	AB		B	
RPLU-0310FCZZ	69- 39	AR		B	
RPLU-0314FCZZ	68- 7	BC		B	
RPLU-0326FCZ1	25- 9	AN		B	
RPLU-0327FCZZ	34- 20	AQ		B	
RPLU-0329FCZZ	18- 27	AQ		B	
RPLU-0330FCZZ	31- 1	AT		B	
RPLU-0331FCZZ	32- 24	AR		B	
RR-WZ0328FCZZ	50- 22	AD		C	
RRLYC4320QCZZ	50- 24	AY		B	
RRLYD3222QCZZ	50- 23	AL		B	
RRLYD4421QCN2	50- 24	AU		B	
RRLYD6120QCZZ	50- 25	AP		B	
RRLYD6121QCZZ	50- 25	AM		B	
RTHM-0009FCZZ	16- 6	AK		B	
RTHM-0014FCZZ	16- 6	AM		B	
RTRNZ0511FCZZ	49- 5	AQ		B	
RTRNZ0547FCZ1	10- 36	BS	N	B	
RTRNZ0547FCZZ	10- 36	BT		B	
RVR-M141JQCZZ	45- 21	AC		B	
"	46- 21	AC		B	
RVR-P0009FCZZ	35- 6	AV		B	
[S]					
SPAKA4527FCZZ	39- 49	AD		C	
SPAKA5210FCZZ	39- 11	AF		D	
"	39- 45	AF		D	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
SPAKA5732FCZZ	39- 12	AG		D	
SPAKA5757FCZ1	39- 2	AW		D	
SPAKA5758FCZZ	39- 13	AD		D	
SPAKA5759FCZZ	39- 14	AD		D	
SPAKA5763FCZ1	39- 2	AW		D	
SPAKA5886FCZ1	39- 44	AE		D	
SPAKA5895FCZ1	39- 2	AT		D	
SPAKA5896FCZ1	39- 5	AT		D	
SPAKA5897FCZ1	39- 2	AT		D	
SPAKA5898FCZ1	39- 5	AT		D	
SPAKA5903FCZ1	39- 6	BE		D	
SPAKA5962FCZZ	39- 2	AT		D	
SPAKA5963FCZZ	39- 5	AT		D	
SPAKA5983FCZZ	39- 2	AT		D	
SPAKA5984FCZZ	39- 5	AT		D	
SPAKA5994FCZZ	39-102	AF		D	
SPAKA6006FCZZ	39- 2	AW	N	D	
SPAKA6007FCZZ	39- 5	AW	N	D	
SPAKA6065FCZZ	39- 47	AD	N	D	
SPAKA6066FCZZ	39- 48	AD	N	D	
SPAKC5748FC13	39- 1	BD		D	
SPAKC5748FC14	39- 1	BD		D	
SPAKC5748FC15	39- 1	BD		D	
SPAKC5833FC11	39- 1	BD		D	
SPAKC5833FC12	39- 1	BD		D	
SPAKC5833FCZZ	39- 1	BD		D	
SPAKC5958FC11	39- 1	BD		D	
SPAKC5958FC17	39- 1	BD		D	
SPAKC5958FC18	39- 1	BD		D	
SPAKC5958FC19	39- 1	BD		D	
SPAKC5958FC20	39- 1	BD		D	
SPAKC5958FC21	39- 1	BD		D	
SPAKC5958FC22	39- 1	BD		D	
SPAKC5958FCZZ	39- 1	BD		D	
SPAKC5959FC11	39- 1	BD		D	
SPAKC5959FC12	39- 1	BD		D	
SPAKC5959FC13	39- 1	BD		D	
SPAKC5959FCZZ	39- 1	BD		D	
SPAKC5981FC11	39- 1	BC		D	
SPAKC5981FCZZ	39- 1	BC		D	
SPAKC5982FCZZ	39- 1	BC		D	
SPAKC6003FC11	39- 1	BD	N	D	
SPAKC6003FC12	39- 1	BD	N	D	
SPAKC6004FCZZ	39- 1	BD	N	D	
SSAKA2440QCZZ	39- 30	AB		D	
SSAKA3001CCZZ	39-101	AA		D	
[T]					
TCADS0649FCZZ	39- 36	AM		D	
TCADS0764FCZZ	39- 42	AE		D	
TCADZ0027YSZZ	39- 43	AE	N	D	
TCADZ1178FCZZ	39- 8	AB		D	
TCADZ1275FCZZ	39- 17	AB		D	
TCADZ1400FCZZ	39- 43	AE		D	
TCADZ1434FCZZ	39- 43	AE		D	
TCADZ1442FCZZ	39- 43	AE		D	
TCADZ2001QCZA	39- 36	AE		D	
TCAUA0766FCZZ	1- 50	AB		C	
"	2- 50	AB		C	
TCAUA0770FCZZ	1- 50	AB		C	
"	2- 50	AB		C	
TCAUH0918FCZZ	1- 50	AA		C	
"	2- 50	AA		C	
TCAUH1028FCZZ	1- 50	AC		C	
"	2- 50	AC		C	
TCAUH1034FCZZ	13- 47	AD		C	
TCAUH1035FCZZ	17- 1	AC		C	
TCAUH1036FCZZ	18- 15	AD		C	
TCAUS1038FCZZ	1- 44	AD		C	
"	18- 16	AD		C	
TiNSE1696FCZZ	39- 37	AY		D	
TiNSE1697FCZZ	39- 37	BA		D	
TiNSE1705FCZZ	39- 39	AN		D	
TiNSE1732FCZZ	39- 37	BB		D	
TiNSE1829FCZ1	39- 37	AY		D	
TiNSE1840FCZZ	39- 39	AN		D	
TiNSF1698FCZZ	39- 37	BF		D	
TiNSG1731FCZZ	39- 37	BF		D	
TiNSH1737FCZZ	39- 37	BF		D	
TiNSi1736FCZZ	39- 37	BF		D	
TiNSR1734FCZZ	39- 37	BF		D	
TiNSS1735FCZZ	39- 37	BF		D	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
TINSW1738FCZZ	39- 37	BF		D	
TINSZ1733FCZZ	39- 37	BF		D	
TLABH4244FCZZ	68- 14	AE		C	
TLABZ4205FCZZ	18- 14	AC		C	
TLABZ4239FCZZ	38- 32	AD		C	
TLABZ4240FCZZ	38- 32	AD		C	
TLABZ4245FCZ1	69- 6	AB		C	
TLABZ4261FCZZ	35- 3	AE		C	
TLABZ4262FCZZ	35- 3	AE		C	
TLABZ4276FCZZ	38- 32	AD		C	
TLABZ4289FCZZ	2- 51	AD		C	
TLABZ4335FCZZ	7- 6	AB		C	
TLABZ4360FCZZ	14- 38	AB		C	
TLABZ4361FCZZ	14- 38	AB		C	
TLABZ4389FCZZ	1- 30	AH	N	C	
TLABZ4390FCZZ	1- 30	AG	N	C	
TLABZ4391FCZZ	14- 38	AA	N	C	
TLABZ4392FCZZ	14- 38	AA	N	C	
【U】					
UBAGF0050FCZZ	39- 4	AH		D	
UBATL2033SCZZ	42- 27	AK		A	
"	43- 30	AK		A	
"	44- 27	AK		A	
UCLEZ0149FCZZ	13- 4	AU		C	
UCLEZ0151FCZ1	13- 9	AS		C	
UCLEZ0152FCZZ	14- 29	AN		C	
UCLEZ0158FCZZ	13- 54	AP		C	
UKOGZ0002FCZZ	39- 33	AD		D	
UYOK-0011FCZZ	39- 34	AA		D	
【V】					
VCCCCY1HH101J	45- 22	AA		C	
"	46- 22	AA		C	
VCCCCY1HH220J	46- 23	AA		C	
VCCCTV1HH220J	40- 17	AA		C	
"	41- 14	AA		C	
VCCCTV1HH300J	42- 28	AA		C	
"	43- 31	AA		C	
VCCCTV1HH6R0D	42- 29	AA		C	
"	43- 32	AA		C	
"	44- 28	AA		C	
VCEA2U0JW108M	43- 38	AD		C	
"	44- 35	AD		C	
VCEA2U1CW477M	43- 39	AD		C	
"	44- 36	AD		C	
VCEA2U1VW227M	43- 40	AD		C	
"	44- 37	AD		C	
VCEAGA1AW477M	40- 19	AB		C	
"	41- 16	AB		C	
VCEAGA1CW477M	40- 20	AB		C	
"	41- 17	AB		C	
VCEAGA1HW224M	40- 21	AA		C	
"	41- 19	AA		C	
VCEAGA1VW106M	40- 23	AA		C	
"	41- 21	AA		C	
VCEAGU1AW476M	40- 18	AA		C	
"	41- 15	AA		C	
VCEAGU1HW105M	41- 18	AA		C	
VCEAGU1HW335M	40- 22	AA		C	
"	41- 20	AA		C	
VCEAGU1VW476M	40- 24	AB		C	
"	41- 22	AB		C	
VCEAJU0JW106M	44- 29	AB		C	
VCEAJU0JW107M	43- 33	AB		C	
"	44- 31	AB		C	
VCEAJU0JW226M	43- 34	AB		C	
"	44- 30	AB		C	
VCEAJU0JW337M	43- 35	AC		C	
"	44- 32	AC		C	
VCEAJU1CW476M	47- 8	AB		C	
VCEAJU1HW105M	43- 36	AB		C	
"	44- 33	AB		C	
VCEAJU1HW335M	43- 37	AB		C	
"	44- 34	AB		C	
VCEAPS0JC107M	42- 30	AC		C	
VCEAPS0JC226M	42- 31	AC		C	
VCEAPS1AC226M	45- 24	AC		C	
"	46- 24	AC		C	
VCEAPS1AC476M	45- 25	AC		C	
"	46- 25	AC		C	
VCEAPS1CC106M	45- 26	AC		C	
"	46- 26	AC		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
VCEAPS1HC105M	42- 32	AC		C	
VCEAPS1HC225M	45- 27	AD		C	
"	46- 27	AD		C	
VCEAPS1HC335M	42- 33	AC		C	
VCEAPS1VC106M	45- 28	AC		C	
"	46- 28	AC		C	
VCEAPZ0JW108M	42- 34	AE		C	
VCEAPZ0JW337M	42- 35	AD		C	
VCEAPZ0JW477M	42- 36	AE		C	
VCEAPZ1AW477M	45- 29	AE		C	
"	46- 29	AE		C	
VCEAPZ1CW477M	42- 37	AE		C	
"	45- 30	AE		C	
"	46- 30	AE		C	
VCEAPZ1HW107M	45- 31	AF		C	
"	46- 31	AF		C	
VCEAPZ1VW107M	45- 32	AE		C	
"	46- 32	AE		C	
VCEAPZ1VW227M	42- 38	AF		C	
VCEAPZ1VW476M	45- 33	AE		C	
"	46- 33	AE		C	
VCEAZA1AW226M	40- 25	AB		C	
"	41- 23	AB		C	
VCEAZU1HW105M	51- 6	AB		C	
VCEAZU1HW477M	51- 7	AE		C	
VCEAZU1VW477M	40- 26	AD		C	
"	41- 24	AD		C	
VCFYEC1HM103J	45- 34	AD		C	
"	46- 34	AD		C	
VCFYFU2ED474M	50- 26	AG		C	
VCFYRT2EC105K	50- 27	AL		C	
VCKYCY1CB473K	45- 35	AB		C	
"	46- 35	AB		C	
VCKYCY1HB102K	45- 36	AA		C	
"	46- 36	AA		C	
VCKYCY1HB103K	45- 37	AA		C	
"	46- 37	AA		C	
VCKYCY1HB222K	45- 38	AA		C	
"	46- 38	AA		C	
VCKYCY1HF223Z	45- 39	AA		C	
"	46- 39	AA		C	
VCKYPU1HB101K	47- 9	AA		C	
VCKYPU1HB102K	52- 4	AA		C	
VCKYPU1HB681K	52- 5	AA		C	
VCKYPU1HF223Z	47- 10	AA		C	
VCKYQY3FF220J	49- 6	AC		C	
VCKYTV1HB101K	40- 27	AA		C	
"	41- 25	AA		C	
VCKYTV1HB102K	40- 28	AA		C	
"	41- 26	AA		C	
"	42- 39	AA		C	
"	43- 41	AA		C	
"	44- 38	AA		C	
VCKYTV1HB222K	40- 29	AA		C	
"	41- 27	AA		C	
VCKYTV1HB471K	40- 30	AA		C	
"	41- 28	AA		C	
VCKYTV1HF103Z	43- 42	AA		C	
"	44- 39	AA		C	
VCKYTV1HF104Z	42- 40	AA		C	
"	43- 43	AA		C	
"	44- 40	AA		C	
VCKYTV1HF223Z	40- 31	AA		C	
"	41- 29	AA		C	
"	42- 41	AA		C	
"	43- 44	AA		C	
"	44- 41	AA		C	
VCQYNA1HM682K	52- 6	AA		C	
VCQYNU1HM103K	40- 32	AA		C	
"	41- 30	AA		C	
VCQYNU1HM104K	50- 28	AB		C	
VHDDAN202K/-1	40- 33	AB		B	
"	41- 31	AB		B	
"	45- 40	AB		B	
"	46- 40	AB		B	
VHDDAN217/-1	42- 42	AC		B	
"	43- 45	AC		B	
"	44- 42	AC		B	
VHDDAP202K/-1	40- 34	AB		B	
"	41- 32	AB		B	
"	42- 43	AB		B	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
VHDDAP202K/-1	43- 46	AB		B	
"	44- 43	AB		B	
"	45- 41	AB		B	
"	46- 41	AB		B	
VHDDSM1D1//-1	40- 35	AB		B	
"	41- 33	AB		B	
VHDDSS133//-1	50- 29	AA		B	
"	52- 7	AA		B	
VHDDSS133HV-1	42- 44	AA		B	
"	43- 47	AA		B	
"	44- 44	AA		B	
VHDMA704A//-1	40- 36	AC		B	
"	41- 34	AC		B	
VHDRB160L40-1	46- 42	AD		B	
VHDRB411D//-1	42- 45	AD		B	
"	43- 48	AD		B	
"	44- 45	AD		B	
VHDRLS73///-1	45- 43	AA		B	
"	46- 43	AA		B	
VHEHZS5A1//-1	43- 49	AC		B	
"	44- 46	AC		B	
VHEHZS5B3//-V	40- 37	AB		B	
"	41- 35	AB		B	
VHEHZS5CLL/-1	40- 38	AC		B	
"	41- 36	AC		B	
VHEHZS6A1//-1	42- 46	AC		B	
"	43- 50	AC		B	
"	44- 47	AC		B	
VHEHZU5.1B1-1	45- 44	AC		B	
"	46- 44	AC		B	
VHERD22FB//-1	40- 39	AD		B	
"	41- 37	AD		B	
VHH103AT-2/-1	47- 11	AG		B	
VHi16MSiMM/-1	5- 51	CB		B	
VHi1816-6///-1	42- 74	AZ		B	
"	43- 77	AZ		B	
VHi28C256E15P	44- 72	BB		B	
VHi28F081-01F	40- 1	BD		E	
VHi28F081-06F	40- 1	BF		B	
VHi28F081-11F	10- 76	BF	N	B	
"	41- 1	BF	N	B	
VHi28F081-13F	40- 1	BF		E	
VHi28F082-01F	42-200	BN		E	
VHi28F082-03F	43-200	BN		E	
VHi28F161-05F	45- 1	BL		B	
VHi28F161A04F	46- 1	BN		B	
VHi28F161A07F	46- 1	BL	N	E	
VHi28F162A04F	44-200	BS	N		
VHi32MSiMM/-1	5- 51	CA		B	
VHi74AHCT04NS	41- 53	AD	N	B	
VHi74AS00//NS	42- 75	AF		B	
VHi74AS04//NS	43- 78	AG		B	
"	44- 73	AG		B	
VHi74AS157NS1	42- 76	AL		B	
"	43- 79	AL		B	
VHi74AS158/NS	42- 77	AN		B	
VHi74F32SJ/-1	45- 59	AE		B	
"	46- 59	AE		B	
VHi74FCT244C1	46- 57	AP		B	
VHi74FCT245T1	46- 58	AR		B	
VHi74LV04NS-1	45- 63	AE		B	
"	46- 63	AE		B	
VHi74LV08NS-1	45- 61	AE		B	
VHi74LV14NS-1	45- 64	AF		B	
"	46- 64	AF		B	
VHi74LV32NS-1	40- 54	AE		B	
"	41- 54	AE		B	
"	45- 62	AE		B	
VHi74LVC04NS1	46- 60	AH		B	
VHi74LVC08NS1	46- 61	AH		B	
VHi74LVC32NS1	46- 62	AH		B	
VHi74VHCT04-1	40- 55	AF		B	
"	45- 65	AF		B	
"	46- 65	AF		B	
VHi74VHCT08F1	42- 78	AF		B	
"	43- 80	AF		B	
"	44- 74	AF		B	
VHi74VHCT240F	42- 79	AH		B	
"	43- 81	AH		B	
"	44- 75	AH		B	
VHi74VHCT244F	42- 80	AH		B	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
VHi74VHCT244F	43- 82	AH		B	
"	44- 76	AH		B	
VHi74VHCT245F	42- 81	AK		B	
"	43- 83	AK		B	
"	44- 77	AK		B	
VHiAD9561JR-1	42- 47	BG		B	
VHiAT28C64B-1	42- 48	AZ		B	
"	43- 51	AZ		B	
VHiBA033FP/-1	46- 45	AH		B	
VHiD65803GL-1	42- 50	BF		B	
"	43- 53	BF		B	
VHiD65806GL-1	42- 51	BK		B	
"	43- 54	BK		B	
"	44- 49	BK		B	
VHiD65808GL-1	42- 52	BM		B	
"	43- 55	BM		B	
"	44- 50	BM		B	
VHiD65948GL-1	44- 51	BH		B	
VHiD82113GN-1	42- 53	BX		B	
VHiD82114GN-1	42- 54	BX		B	
VHiD82165GC-1	42- 55	BE		B	
"	43- 56	BE		B	
VHiD82355GN-1	43- 57	BS		B	
"	44- 52	BS		B	
VHiD82356GN-1	43- 58	BS		B	
VHiD82441GD-1	44- 53	BG	N	B	
VHiD9001MF-H/	42- 56	BK		B	
VHiDS90C031-1	42- 49	AW		B	
VHiDS90C401-1	43- 52	AU		B	
"	44- 48	AU		B	
VHiH256-20-8A	40- 42	AY		B	
"	41- 40	AY		B	
"	45- 47	AY		B	
"	46- 47	AY		B	
VHiHD6413003T	40- 40	BA		B	
"	41- 38	BA		B	
"	45- 46	BA		B	
"	46- 46	BA		B	
VHiHG71C254-1	40- 41	AZ		B	
"	41- 39	AZ		B	
VHiIS61C25612	42- 57	AN		B	
"	43- 59	AN		B	
"	44- 54	AN		B	
VHiIS61C51215	42- 58	AU		B	
"	43- 60	AU		B	
"	44- 55	AU		B	
VHiKZ4E038E-1	44- 56	BF	N	B	
VHiLH537C0G-1	42- 59	BC		B	
"	43- 61	BC		B	
"	44- 57	BC		B	
VHiLM317MDT-1	45- 48	AK		B	
"	46- 48	AK		B	
VHiLM324NS/-S	40- 43	AC		B	
"	41- 41	AC		B	
VHiLM339NS/-1	40- 44	AD		B	
"	41- 42	AD		B	
"	42- 60	AD		B	
"	43- 62	AD		B	
"	44- 58	AD		B	
"	45- 49	AD		B	
"	46- 49	AD		B	
VHiLM358P//-1	52- 8	AG		B	
VHiLM358PS/-S	45- 50	AC		B	
"	46- 50	AC		B	
VHiLR3717M/-1	47- 12	AH		B	
VHiLZ9AT36/-1	42- 61	BB		B	
"	43- 63	BB		B	
"	44- 59	BB		B	
VHiM5256DVP-1	46- 52	AQ		B	
VHiM54587FP-1	45- 53	AK		B	
"	46- 53	AK		B	
VHiM66235FP-1	42- 64	AT		B	
"	43- 67	AT		B	
VHiM66500FP-1	40- 45	AT		B	
"	41- 43	AT		B	
VHiMB86604L-1	42- 62	BC		B	
"	43- 65	BC		B	
"	44- 60	BC		B	
VHiMCF5202P25	42- 63	BG		B	
"	43- 66	BG		B	
"	44- 61	BG		B	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
VH i MSM82C55GS	46- 51	AS		B	
VH i NJM78L05UA	45- 54	AE		B	
"	46- 54	AE		B	
VH i NJU6356E-1	42- 65	AK		B	
"	43- 68	AK		B	
"	44- 62	AK		B	
VH i PM-2MC/-1	43- 64	BN		B	
VH i PM2060i/-1	44- 63	BP	N	B	
VH i SC908SF2V1	46- 55	AW		B	
VH i SD6416-100	44- 64	BG		B	
VH i SLA7024MT/	40- 46	AS		B	
"	41- 44	AS		B	
VH i SLA907FF2L	45- 55	AT		B	
VH i SN74ALS574	42- 66	AL		B	
"	43- 69	AL		B	
"	44- 65	AL		B	
VH i SN74ALS74N	42- 67	AF		B	
VH i SN74AS74NS	42- 68	AH		B	
"	43- 70	AH		B	
"	44- 66	AH		B	
VH i SN74HC138S	40- 47	AE		B	
"	41- 45	AE		B	
VH i SN74HC151S	40- 48	AG		B	
"	41- 46	AG		B	
VH i SN74HCT244	45- 56	AF		B	
"	46- 56	AF		B	
VH i STA401A/-1	40- 49	AP		B	
"	41- 47	AP		B	
VH i STK67250-1	51- 8	BB		B	
VH i STK67260-1	41- 48	AZ	N	B	
VH i TA7291S/-1	40- 50	AF		B	
"	41- 49	AF		B	
VH i TC4051BP-1	52- 9	AQ		B	
VH i TC74AC04FN	42- 70	AD		B	
"	43- 73	AD		B	
"	44- 69	AD		B	
VH i TC74AC08FN	42- 71	AE		B	
"	43- 74	AE		B	
"	44- 70	AE		B	
VH i TC74AC32FN	42- 72	AD		B	
VH i TC74ACT08F	43- 71	AF		B	
"	44- 67	AF		B	
VH i TC74ACT32F	42- 69	AF		B	
"	43- 72	AF		B	
"	44- 68	AF		B	
VH i TD62003AP1	40- 51	AG		B	
"	41- 50	AG		B	
VH i TD62503F/-	42- 73	AG		B	
"	43- 75	AG		B	
"	44- 71	AG		B	
VH i TD62504/-1	51- 9	AG		B	
VH i TD62504F-1	40- 52	AF		B	
"	41- 51	AF		B	
VH i TE7752/-1	40- 53	AX		B	
"	41- 52	AX		B	
VH i XLi2050X-1	43- 76	BQ		B	
VH PGL3PR8/-1	40- 56	AA		B	
"	41- 55	AA		B	
"	42- 82	AA		B	
VH PGP1A22LC-1	5- 43	AK		B	
"	33- 14	AK		B	
VH PGP1A71A1-1	23- 25	AG		B	
"	34- 15	AG		B	
"	35- 17	AG		B	
"	71- 24	AG		B	
VH PGP3A38/-1	6- 21	AH		B	
VH PLT1D67A/-1	45- 66	AC		B	
"	46- 66	AC		B	
VH PLT9400E/-1	47- 14	AK		B	
VH PMPG3864K-J	47- 13	AC		B	
"	48- 6	AC		B	
VH PMPVR3864K-J	43- 84	AC		B	
"	44- 78	AC		B	
VH PPD49Pi/-1	52- 10	AE		B	
VH PSLA10310-1	23- 41	AZ	N	C	
VH RS11MD5V/-1	50- 34	AF		B	
VH RS21MD3V/-1	50- 34	AE		B	
VH STM1641P-LF	50- 35	AQ		B	
VH STM1661P-LF	50- 35	AQ		B	
VH ViCPN50/-1	10-102	AE		C	
VRD-HT2EY101J	47- 15	AA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
VRD-HT2EY102J	47- 16	AA		C	
VRD-HT2EY104J	52- 11	AA		C	
VRD-HT2EY105J	50- 36	AA		C	
VRD-HT2EY121J	47- 17	AA		C	
VRD-HT2EY274J	52- 12	AA		C	
VRD-HT2EY303J	52- 13	AA		C	
VRD-HT2EY331J	48- 9	AA		C	
VRD-HT2EY391J	47- 18	AA		C	
VRD-HT2EY471J	48- 10	AA		C	
"	52- 14	AA		C	
VRD-HT2HY242J	40- 57	AA		C	
"	41- 56	AA		C	
VRD-HT2HY274J	50- 36	AA		C	
VRD-HT2HY471J	40- 58	AA		C	
"	41- 57	AA		C	
VRD-RC2EY103J	40- 59	AA		C	
"	41- 58	AA		C	
"	49- 7	AA		C	
VRD-RC2EY163J	51- 13	AA		C	
VRD-RC2EY392J	40- 60	AA		C	
VRNHT2HK1000F	40- 61	AC		C	
"	41- 59	AC		C	
VRNRC2EK2201F	51- 10	AA		C	
VRNRC2EK2700F	51- 11	AB		C	
VRNRC2EK8200F	51- 12	AA		C	
VRS-HT2HA101J	50- 38	AA		C	
VRS-HT2HA121J	50- 39	AA		C	
VRS-HT2HA201J	50- 39	AA		C	
VRS-RE3DA1R0J	40- 62	AB		C	
"	41- 60	AB		C	
VRS-RE3LA470J	40- 63	AC		C	
"	41- 61	AC		C	
VRS-TP2BD000J	46- 67	AA		C	
VRS-TP2BD271J	45- 68	AA		C	
"	46- 68	AA		C	
VRS-TS2AD000J	40- 64	AA		C	
"	41- 62	AA		C	
"	42- 83	AA		C	
"	43- 85	AA		C	
"	44- 79	AA		C	
"	46- 69	AA		C	
VRS-TS2AD101F	41- 63	AB		C	
VRS-TS2AD101J	40- 65	AA		C	
"	41- 64	AA		C	
"	42- 84	AA		C	
"	43- 86	AA		C	
"	44- 80	AA		C	
VRS-TS2AD102J	40- 66	AA		C	
"	41- 65	AA		C	
"	42- 85	AA		C	
"	43- 87	AA		C	
"	44- 81	AA		C	
VRS-TS2AD103F	40- 67	AA		C	
"	41- 66	AA		C	
"	45- 70	AA		C	
"	46- 70	AA		C	
VRS-TS2AD103J	40- 68	AA		C	
"	41- 67	AA		C	
"	42- 86	AA		C	
"	43- 88	AA		C	
"	44- 82	AA		C	
"	45- 71	AA		C	
"	46- 71	AA		C	
VRS-TS2AD104J	40- 69	AA		C	
"	41- 68	AA		C	
VRS-TS2AD105J	42- 87	AA		C	
"	43- 89	AA		C	
"	45- 72	AA		C	
"	46- 72	AA		C	
VRS-TS2AD122J	40- 70	AA		C	
"	41- 69	AA		C	
"	42- 88	AA		C	
"	43- 90	AA		C	
"	44- 83	AA		C	
"	45- 73	AA		C	
"	46- 73	AA		C	
VRS-TS2AD123F	45- 74	AA		C	
"	46- 74	AA		C	
VRS-TS2AD133F	40- 71	AA		C	
"	41- 70	AA		C	
VRS-TS2AD151J	40- 72	AA		C	



PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK
VRS-TS2AD151J	41- 71	AA		C
"	42- 89	AA		C
"	43- 91	AA		C
"	44- 84	AA		C
"	45- 75	AA		C
"	46- 75	AA		C
VRS-TS2AD152F	40- 73	AA		C
"	41- 72	AA		C
VRS-TS2AD152J	40- 74	AA		C
"	41- 73	AA		C
VRS-TS2AD153F	40- 75	AA		C
"	41- 74	AA		C
"	44- 85	AA		C
VRS-TS2AD154F	45- 76	AA		C
"	46- 76	AA		C
VRS-TS2AD162J	40- 76	AA		C
VRS-TS2AD183F	45- 77	AA		C
"	46- 77	AA		C
VRS-TS2AD183J	45- 78	AA		C
"	46- 78	AA		C
VRS-TS2AD200J	42- 90	AA		C
"	43- 92	AA		C
VRS-TS2AD202J	45- 79	AA		C
"	46- 79	AA		C
VRS-TS2AD203F	44- 86	AA		C
VRS-TS2AD203J	40- 77	AA		C
"	41- 75	AA		C
"	45- 80	AA		C
"	46- 80	AA		C
VRS-TS2AD220J	44- 87	AA		C
VRS-TS2AD221J	42- 91	AA		C
"	43- 93	AA		C
VRS-TS2AD222J	40- 78	AA		C
"	41- 76	AA		C
"	42- 92	AA		C
"	43- 94	AA		C
"	44- 88	AA		C
"	45- 81	AA		C
"	46- 81	AA		C
VRS-TS2AD223J	42- 93	AA		C
"	43- 95	AA		C
"	44- 89	AA		C
VRS-TS2AD224J	42- 94	AA		C
"	43- 96	AA		C
"	44- 90	AA		C
VRS-TS2AD242J	40- 79	AA		C
"	41- 77	AA		C
VRS-TS2AD272J	45- 82	AA		C
"	46- 82	AA		C
VRS-TS2AD301F	41- 78	AA		C
"	45- 83	AA		C
"	46- 83	AA		C
VRS-TS2AD301J	42- 95	AA		C
"	43- 97	AA		C
"	44- 91	AA		C
VRS-TS2AD303J	45- 84	AA		C
"	46- 84	AA		C
VRS-TS2AD304F	45- 85	AA		C
"	46- 85	AA		C
VRS-TS2AD304J	40- 80	AA		C
"	41- 80	AA		C
VRS-TS2AD330J	40- 81	AA		C
"	41- 81	AA		C
"	44- 92	AA		C
VRS-TS2AD331J	43- 99	AA		C
VRS-TS2AD333J	45- 86	AA		C
"	46- 86	AA		C
VRS-TS2AD334J	45- 87	AA		C
"	46- 87	AA		C
VRS-TS2AD363F	45- 88	AA		C
"	46- 88	AA		C
VRS-TS2AD363J	42- 96	AA		C
"	43- 98	AA		C
"	44- 93	AA		C
VRS-TS2AD391J	40- 82	AA		C
"	41- 82	AA		C
"	42- 97	AA		C
"	43-100	AA		C
"	44- 94	AA		C
VRS-TS2AD392F	40- 83	AA		C
"	41- 83	AA		C

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK
VRS-TS2AD392F	44- 95	AA		C
VRS-TS2AD393J	42- 98	AA		C
"	43-101	AA		C
"	44- 96	AA		C
VRS-TS2AD471J	40- 84	AA		C
"	41- 84	AA		C
VRS-TS2AD472F	40- 85	AA		C
"	41- 85	AA		C
"	44- 97	AA		C
VRS-TS2AD472J	40- 86	AA		C
"	41- 86	AA		C
"	42- 99	AA		C
"	43-102	AA		C
"	44- 98	AA		C
VRS-TS2AD473F	40- 87	AA		C
"	41- 87	AA		C
VRS-TS2AD473J	40- 88	AA		C
"	41- 88	AA		C
"	45- 89	AA		C
"	46- 89	AA		C
VRS-TS2AD514J	40- 89	AG		C
"	41- 89	AG		C
VRS-TS2AD562J	40- 90	AA		C
"	41- 90	AA		C
"	42-100	AA		C
"	43-103	AA		C
"	44- 99	AA		C
VRS-TS2AD564F	45- 90	AC		C
"	46- 90	AC		C
VRS-TS2AD621J	40- 91	AA		C
"	41- 91	AA		C
VRS-TS2AD622F	45- 91	AA		C
"	46- 91	AA		C
VRS-TS2AD623J	45- 92	AA		C
"	46- 92	AA		C
VRS-TS2AD624J	45- 93	AA		C
"	46- 93	AA		C
VRS-TS2AD681F	40- 92	AA		C
"	41- 92	AA		C
VRS-TS2AD681J	40- 93	AA		C
"	41- 93	AA		C
VRS-TS2AD683J	42-101	AA		C
"	43-104	AA		C
"	44-100	AA		C
VRS-TS2AD750F	44-101	AA		C
VRS-TS2AD752F	45- 94	AA		C
"	46- 94	AA		C
VRS-TS2AD752J	45- 95	AA		C
"	46- 95	AA		C
VRS-TS2AD753F	45- 96	AA		C
"	46- 96	AA		C
VRS-TS2AD820J	42-102	AA		C
"	43-105	AA		C
"	44-102	AA		C
VRS-TS2AD822J	40- 94	AA		C
"	41- 94	AA		C
VRS-TS2AD911J	40- 95	AA		C
"	41- 95	AA		C
"	42-103	AA		C
"	43-106	AA		C
"	44-103	AA		C
VRS-TS2AD913J	42-104	AA		C
"	43-107	AA		C
"	44-104	AA		C
VRS-TW2ED221J	42-105	AA		C
"	43-108	AA		C
"	44-105	AA		C
VRS-TW2ED331J	42-106	AA		C
"	43-109	AA		C
"	44-106	AA		C
VRS-TW2ED560J	45- 97	AA		C
"	46- 97	AA		C
VRS-TW2ED911J	45- 98	AB		C
"	46- 98	AB		C
VRS-TX2HD470J	45- 99	AA		C
"	46- 99	AA		C
VRSTS2AD2940F	43-110	AA		C
VRSTS2AD3570F	43-111	AA		C
VRSTS2AD4020F	42-107	AA		C
VS2SB1132-R-1	40- 98	AE		B
VS2SB1197/-1	45-105	AC		B

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
VS2SB1197// -1	46-105	AC		B	
VS2SB1198K// -1	45-106	AC		B	
"	46-106	AC		B	
VS2SC2412K// -1	40- 99	AB		B	
"	41- 99	AB		B	
VS2SC3332// -1	49- 8	AE		B	
VS2SC945/// -1	40-100	AD		B	
"	41-100	AD		B	
VS2SD1782K// -1	45-107	AC		B	
"	46-107	AC		B	
VSDTA114YK// -1	42-108	AC		B	
"	43-112	AC		B	
"	44-107	AC		B	
"	45-100	AC		B	
"	46-100	AC		B	
VSDTA123YK// -1	40- 96	AB		B	
"	41- 96	AB		B	
VSDTC114EK// -1	42-109	AB		B	
"	43-112	AB		B	
"	44-108	AB		B	
VSDTC114YK// -1	40- 97	AC		B	
"	41- 97	AC		B	
"	42-110	AC		B	
"	43-113	AC		B	
"	44-109	AC		B	
"	45-101	AC		B	
"	46-101	AC		B	
VSDTC114YS// -1	47- 19	AB		B	
VSDTC124XK// -1	42-111	AB		B	
"	43-114	AB		B	
"	44-110	AB		B	
VSIMB9AT110-1	45-102	AC		B	
"	46-102	AC		B	
VSIMH9AT110-1	45-103	AC		B	
"	46-103	AC		B	
VSUPA502T// -1	45-104	AD		B	
"	46-104	AD		B	
VVLLM400031-1	3- 5	BY		B	
[X]					
XBBS240P08000	13- 2	AB		C	
"	13- 53	AB		C	
XBBSD30P04000	33- 23	AA		C	
XBBSD30P06000	16- 7	AA		C	
XBBSD40P06000	5- 2	AA		C	
"	5- 75	AA		C	
"	5- 88	AA		C	
"	9- 74	AA		C	
"	10- 70	AA		C	
"	17- 6	AA		C	
XBBSD40P08000	18- 59	AA		C	
XBBSD40P10000	5- 44	AA		C	
"	6- 4	AA		C	
"	14- 52	AA		C	
"	38- 28	AA		C	
XBBSD40P12000	29- 22	AA		C	
"	33- 16	AA		C	
"	36- 13	AA		C	
XBBSD40P20000	9- 75	AA		C	
XBBSD50P16000	9- 34	AB		C	
XBPBW30P06KS0	15- 1	AC		C	
XBPS230P04000	36- 2	AA		C	
XBPS240P06000	13- 3	AA		C	
XBPSD20P03000	25- 12	AA		C	
XBPSD30P04000	16- 4	AA		C	
"	31- 2	AA		C	
XBPSD30P05000	7- 25	AA		C	
XBPSD30P06000	5- 46	AA		C	
"	25- 1	AA		C	
"	37- 7	AA		C	
XBPSD30P06KS0	4- 6	AA		C	
"	7- 27	AA		C	
"	17- 8	AA		C	
"	18- 26	AA		C	
"	68- 8	AA		C	
"	69- 40	AA		C	
XBPSD30P08000	70- 3	AA		C	
XBPSD30P08KS0	15- 6	AA		C	
"	16- 43	AA		C	
"	17- 12	AA		C	
XBPSD30P10K00	19- 4	AA		C	
"	50- 42	AA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
XBPSD30P10KS0	16- 1	AB		C	
XBPSD30P14000	11- 60	AA		C	
XBPSD30P18KS0	9- 4	AA		C	
XBPSD30P30K00	18- 37	AA		C	
XBPSD40P06000	6- 22	AA		C	
"	10- 13	AA		C	
XBPSD40P06K00	6- 24	AA		C	
"	11- 19	AA		C	
XBPSD40P08KS0	9- 12	AA		C	
"	11- 22	AA		C	
"	24- 36	AA		C	
"	27- 4	AA		C	
"	33- 20	AA		C	
"	38- 19	AA		C	
XBPSD40P12KS0	23- 31	AA		C	
XBPSD40P14000	5- 7	AA		C	
XBPSD40P14K00	12- 11	AA		C	
XBPSD40P20000	18- 22	AA		C	
XBPSD40P20XS0	11- 27	AA		C	
XBPSD40P25XS0	11- 27	AA		C	
XBPSD40P27000	36- 4	AA		C	
XBPSD40P30000	9- 50	AA		C	
XPBSE25P08000	10- 71	AA		C	
XBSSE30P10000	1- 36	AA		C	
XBTSC50P16000	4- 25	AA		C	
XBTSE40P04000	1- 32	AA		C	
XCPSD20P05000	13- 41	AA		C	
XEBSD30P06000	10- 53	AA		C	
"	21- 7	AA		C	
"	35- 7	AA		C	
XEBSD30P08000	9- 80	AA		C	
"	13- 18	AA		C	
"	15- 4	AA		C	
"	34- 27	AA		C	
"	38- 8	AA		C	
"	69- 8	AA		C	
"	70- 15	AA		C	
XEBSD30P10000	9- 42	AA		C	
"	13- 32	AA		C	
"	17- 16	AA		C	
"	21- 11	AA		C	
XEBSD30P12000	21- 19	AA		C	
"	34- 22	AA		C	
"	38- 3	AA		C	
XEBSD30P16000	9- 40	AA		C	
XEBSD40P06000	6- 44	AA		C	
XEBSD40P08000	1- 8	AA		C	
"	13- 5	AA		C	
"	18- 28	AA		C	
"	19- 29	AA		C	
"	33- 24	AA		C	
"	38- 21	AA		C	
"	70- 6	AA		C	
XEBSD40P10000	20- 10	AA		C	
"	34- 31	AA		C	
XEBSD40P12000	20- 16	AA		C	
"	23- 18	AA		C	
"	32- 20	AA		C	
"	68- 10	AA		C	
"	69- 28	AA		C	
"	70- 16	AA		C	
XEBSD40P16000	9- 63	AA		C	
XEBSE30P08000	35- 4	AA		C	
"	35- 24	AA		C	
XEBSE40P08000	1- 38	AA		C	
XEBSE40P14000	9- 71	AA		C	
XEBSF30P05000	7- 26	AA		C	
XEBSF30P06000	7- 23	AA		C	
XEBSF30P08000	14- 6	AA		C	
XEPSD30P05000	4- 11	AA		C	
XEPSD30P06000	3- 21	AA		C	
"	13- 8	AA		C	
"	36- 5	AA		C	
"	37- 11	AA		C	
XEPSD30P08000	3- 3	AA		C	
"	4- 13	AA		C	
"	13- 14	AA		C	
XEPSD30P08X00	69- 42	AA		C	
XEPSD30P14X00	19- 1	AA		C	
XEPSD30P16000	3- 11	AA		C	
XEPSD40P06000	8- 6	AA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
XEPSD40P08000	13- 46	AA		C	
"	22- 52	AA		C	
XEPSD40P10000	69- 20	AA		C	
"	71- 3	AA		C	
XEPSD40P30000	10- 8	AA		C	
"	11- 8	AA		C	
XEPSD40P35000	9- 56	AA		C	
"	23- 22	AA		C	
XEPSE40P10000	20- 20	AA		C	
XESSE30P08000	2- 7	AA		C	
XHBSD30P05000	18- 40	AA		C	
XHBSD30P06000	7- 2	AA		C	
"	18- 45	AA		C	
"	25- 7	AA		C	
"	28- 13	AA		C	
"	31- 12	AA		C	
"	32- 6	AA		C	
XHBSD30P08000	5- 41	AA		C	
"	7- 24	AA		C	
"	8- 5	AA		C	
"	22- 20	AA		C	
"	24- 35	AA		C	
XHBSD40P08000	5- 23	AA		C	
"	6- 26	AA		C	
"	12- 16	AA		C	
"	22- 17	AA		C	
"	23- 16	AA		C	
"	27- 3	AA		C	
"	29- 21	AA		C	
"	68- 18	AA		C	
"	69- 15	AA		C	
"	71- 4	AA		C	
XHBSD40P16000	22- 53	AA		C	
XHBSE30P06000	1- 47	AA		C	
"	2- 47	AA		C	
"	11- 41	AA		C	
XHBSE40P06000	6- 53	AA		C	
XHBSE40P08000	1- 2	AA		C	
"	2- 2	AA		C	
"	5- 3	AA		C	
"	5- 63	AA		C	
"	6- 37	AA		C	
"	9- 1	AA		C	
"	9- 66	AA		C	
"	10- 1	AA		C	
"	10- 45	AA		C	
"	11- 1	AA		C	
"	11- 45	AA		C	
"	11- 66	AA		C	
"	12- 1	AA		C	
"	17- 51	AA		C	
"	18- 18	AA		C	
"	21- 25	AA		C	
"	22- 51	AA		C	
"	23- 39	AA		C	
"	24- 4	AA		C	
"	25- 8	AA		C	
"	30- 14	AA		C	
"	31- 3	AA		C	
"	32- 1	AA		C	
"	33- 11	AA		C	
"	34- 43	AA		C	
XHBSE40P10000	1- 27	AA		C	
"	19- 31	AA		C	
XHBSE40P14000	9- 70	AA		C	
XHPSD30P14000	18- 24	AA		C	
XJBSD40P12000	1- 43	AA		C	
XNESD40-32000	5- 5	AA		C	
XPSSJ20-12000	32- 12	AA		C	
XPSSJ20-15000	34- 40	AA		C	
XRESP20-03000	30- 6	AA		C	
XRESP20-04000	55- 39	AA		C	
"	68- 27	AA		C	
XRESP25-04000	32- 27	AA		C	
XRESP30-04000	71- 32	AA		C	
XRESP30-05000	19- 9	AA		C	
"	21- 22	AA		C	
"	22- 28	AA		C	
"	32- 7	AA		C	
"	57- 61	AA		C	
XRESP30-06000	4- 3	AA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
XRESP40-06000	13- 28	AA		C	
"	14- 19	AA		C	
"	15- 15	AA		C	
"	19- 7	AA		C	
"	20- 11	AA		C	
"	24- 37	AA		C	
"	25- 13	AA		C	
"	30- 9	AA		C	
"	31- 28	AA		C	
"	33- 1	AA		C	
"	34- 48	AA		C	
"	57- 97	AA		C	
"	58- 49	AA		C	
"	69- 10	AA		C	
"	69- 31	AA		C	
"	71- 5	AA		C	
XRESP50-06000	13- 45	AA		C	
"	15- 8	AA		C	
"	16- 13	AA		C	
"	17- 18	AA		C	
"	18- 2	AA		C	
"	19- 11	AA		C	
"	20- 1	AA		C	
"	22- 7	AA		C	
"	23- 11	AA		C	
"	26- 7	AA		C	
"	28- 7	AA		C	
"	29- 1	AA		C	
"	31- 6	AA		C	
"	32- 13	AA		C	
"	34- 4	AA		C	
"	34- 56	AA		C	
"	57- 46	AA		C	
"	59- 43	AA		C	
"	68- 3	AA		C	
"	69- 1	AA		C	
"	70- 10	AA		C	
"	71- 9	AA		C	
XRESP70-08000	6- 12	AA		C	
"	21- 15	AA		C	
"	22- 1	AA		C	
"	23- 2	AA		C	
"	24- 1	AA		C	
"	25- 16	AA		C	
"	26- 1	AA		C	
"	27- 1	AA		C	
"	29- 6	AA		C	
"	34- 11	AA		C	
"	34- 56	AA		C	
"	38- 31	AA		C	
"	56- 18	AA		C	
"	57- 49	AA		C	
"	59- 36	AA		C	
"	68- 1	AA		C	
"	69- 18	AA		C	
"	71- 29	AA		C	
XRESP80-09000	57- 54	AA		C	
XRESP90-08000	24- 41	AA		C	
XUBSD30P05000	14- 34	AA		C	
XWHSD30-05080	16- 5	AA		C	
XWHSD30-05800	18- 35	AA	N	C	
XWHSD30-08100	35- 12	AA		C	
XWSSD40-10000	18- 23	AA		C	
XWVSD40-05000	12- 8	AA		C	
XXHUW40L30000	9- 32	AD		C	
"	12- 12	AD		C	
【0】					
0AV1390000107	53- 12	AC		C	
0AV1390000108	53- 13	AC		C	
0AV1390000109	53- 14	AC		C	
0AV1390000131	53-143	AD		C	
0AV1390000132	53-144	AD		C	
0AV1390000135	53- 19	AG		C	
0AV1390000136	53- 16	AF		C	
0AV1390000137	53- 17	AG		C	
0AV1390000139	53- 18	AG		C	
0AV1390000140	53- 15	AE		C	
0AV1390000149	53- 1	AS		C	
0AV1471830090	53- 2	AD		C	
0AV1480000073	53- 4	AG		C	
0AV1550000003	53- 3	AL		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0AV1610000001	53-162	AB		C	
0AV1610000034	53- 6	AD		C	
0AV1610000036	53-141	AC		C	
0AV1610000039	53- 5	AB		C	
0AV1610000055	53-161	AD		C	
0AV1610000056	53- 9	AD		C	
"	53-142	AD		C	
0AV1610000066	53- 11	AD		C	
0AV1610000067	53- 7	AC		C	
0AV1650000068	53- 8	AD		C	
0AV1690000001	53- 10	AB		C	
0AV1690000066	53-163	AD		C	
0AV2011013010	53- 68	AA		C	
0AV2011023010	53- 69	AA		C	
0AV2011033010	53- 70	AA		C	
"	53-147	AA		C	
"	53-166	AA		C	
0AV2011043010	53- 71	AA		C	
0AV2011043030	53- 86	AA		C	
0AV2011213020	53- 82	AA		C	
0AV2011223010	53- 72	AA		C	
0AV2011233010	53-167	AA		C	
0AV2011243010	53- 73	AA		C	
0AV2011533010	53- 74	AA		C	
0AV2011823030	53- 87	AB		C	
0AV2011843030	53- 88	AB		C	
0AV2012213020	53- 83	AA		C	
0AV2012223010	53- 75	AA		C	
"	53-168	AA		C	
0AV2012233010	53-169	AA		C	
0AV2012723010	53- 76	AA		C	
0AV2012733010	53-148	AA		C	
0AV2013033010	53- 77	AA		C	
"	53-149	AA		C	
0AV2013323010	53- 78	AA		C	
"	53-150	AA		C	
"	53-170	AA		C	
0AV2013333010	53- 79	AA		C	
"	53-151	AA		C	
0AV2014703010	53- 80	AA		C	
0AV2014723010	53- 81	AA		C	
"	53-171	AA		C	
0AV2014723020	53- 84	AA		C	
0AV2014773020	53- 85	AA		C	
0AV2015623010	53-172	AA		C	
0AV2021033040	53- 96	AC		C	
0AV2022203040	53- 97	AC		C	
0AV2022213070	53- 94	AF		C	
0AV2022233060	53- 93	AC		C	
0AV2022733040	53- 98	AC		C	
0AV2023923040	53- 99	AC		C	
0AV2024703070	53- 95	AF		C	
0AV2026803040	53-100	AC		C	
0AV2041003030	53- 64	AC		B	
0AV2041013010	53- 89	AC		B	
0AV2041033020	53- 92	AC		B	
0AV2042203010	53- 90	AC		B	
0AV2043303030	53- 62	AC		B	
0AV2044773030	53- 63	AC		B	
0AV2048203010	53- 91	AC		B	
0AV2051094075	53- 65	AG		B	
0AV2053374087	53- 67	AH		B	
0AV2055094075	53- 66	AF		B	
0AV2060012000	53- 43	AH		A	
0AV2081029181	53-104	AH		B	
0AV2990037000	53-173	AB		C	
0AV2990038000	53-174	AB		C	
0AV3021004999	53- 61	AD		B	
0AV3021815500	53- 57	AC		B	
"	53-146	AC		B	
0AV3022655500	53- 58	AE		B	
0AV3040176999	53- 59	AN		B	
0AV3041168000	53- 60	AW		B	
0AV3050019000	53- 26	AF		B	
0AV3050033000	53- 28	AE		B	
0AV3050036000	53- 37	AF		B	
0AV3050038000	53- 20	AF		B	
0AV3050069000	53- 25	AE		B	
0AV3050070000	53- 38	AK		B	
0AV3050079000	53- 21	AG		B	
0AV3050082000	53- 29	AQ		B	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0AV3050083000	53- 30	AR		B	
0AV3050086000	53- 22	AB		B	
"	53-164	AB		B	
0AV3060021000	53- 24	AB		B	
0AV3060040000	53- 23	AR		B	
0AV3060041000	53- 27	AD		B	
0AV3070042000	53- 35	AB		B	
0AV3070044000	53- 31	AB		B	
0AV3070061000	53- 33	AC		B	
0AV3070077000	53- 34	AE		B	
0AV3070097000	53- 32	AC		B	
0AV3070103000	53- 36	AC		B	
0AV3082561300	53- 56	AF		B	
0AV3090008000	53-165	AK		B	
0AV3090041000	53- 46	AF		B	
0AV3090046000	53- 45	AN		B	
0AV3090071000	53- 44	AN		B	
0AV3090072000	53- 47	AG		B	
0AV3090073000	53-145	AP		B	
0AV3160031000	53-102	AR		B	
0AV4000114011	53-103	BC		B	
0AV4020034611	53- 52	BE		C	
0AV4050005000	53- 49	AD		C	
0AV4050016000	53- 55	AG		C	
0AV4070055000	53- 48	AR		C	
0AV4080006000	53- 50	AS		C	
0AV4120002000	53- 51	AC		C	
0AV4120007000	53- 53	AD		C	
0AV4120008000	53- 54	AD		C	
0AV5030036000	53-108	AC		C	
0AV5030103000	53-152	AF		C	
0AV5030104000	53-175	AE		C	
0AV5030105000	53-109	AM		C	
0AV5030106000	53-110	AL		C	
0AV5030107000	53-111	AN		C	
0AV5030108000	53-112	AK		C	
0AV5030109000	53-113	AD		C	
0AV5030114000	53-114	AF		C	
0AV5050005000	53-105	AA		C	
0AV5060031000	53- 39	AG		A	
0AV5060059000	53- 40	AG		A	
0AV5060077000	53- 41	AF		A	
0AV5070000013	53- 42	AF		A	
0AV5130007000	53-107	AC		C	
0AV5130008000	53-106	AC		C	
0AV5140020000	53-101	AK		C	
0AV6111017811	53-176	AZ		C	
0AV6113101611	53-115	AQ		C	
0AV6113101711	53-177	AR		C	
0AV6114026411	53-180	AE		C	
0AV6114058511	53-179	AG		C	
0AV6114101711	53-178	AH		C	
0AV7200004000	53-181	AD		C	
0AV7414114111	53-185	AD		C	
0AV7414119011	53-186	AD		C	
0AV8112230314	53-184	AA		C	
0AV8112230714	53-183	AA		C	
0AV8117730514	53-116	AB		C	
0AV8140230314	53-182	AA		C	
0CW020050FZSA	58- 84	AB		C	
0CW023120FBWS	55- 42	AB		C	
"	59- 63	AB		C	
"	66- 85	AB		C	
0CW023140FBWS	57- 80	AC		C	
0CW030030FNiT	55- 70	AB		C	
"	57- 96	AB		C	
0CW030030FZiT	57- 81	AB		C	
0CW030040FZBi	58- 41	AA		C	
"	59- 52	AA		C	
"	64- 90	AA		C	
0CW030040FZBP	66- 49	AA		C	
0CW030040FZiT	58- 47	AA		C	
0CW030040FZWS	58- 38	AA		C	
0CW030050FZBi	66-134	AA		C	
0CW030050FZWS	66- 64	AA		C	
0CW030060FNBi	58- 43	AA		C	
"	60- 18	AA		C	
0CW030060FNTP	56- 19	AB		C	
0CW030060FPWP	66- 24	AA		C	
0CW030060FZBB	65- 49	AB		C	
0CW030060FZBi	58- 34	AA		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK
0CW030060FZBi	59- 34	AA		C
"	62- 33	AA		C
"	64- 4	AA		C
"	66- 76	AA		C
0CW030060FZBP	58- 37	AA		C
"	59- 50	AA		C
"	66- 37	AA		C
0CW030060FZiT	56- 41	AA		C
"	57- 67	AA		C
0CW030060FZSW	56- 15	AA		C
"	59- 35	AA		C
0CW030060FZTP	55- 34	AA		C
"	56- 17	AA		C
"	57- 63	AA		C
"	58- 40	AA		C
"	59- 40	AA		C
0CW030060FZWS	55- 38	AA		C
"	56- 22	AA		C
"	66- 67	AA		C
0CW030080FPWP	57- 65	AB		C
0CW030080FZBB	55- 46	AB		C
"	58- 33	AB		C
"	59- 59	AB		C
"	60- 15	AB		C
"	60- 28	AB		C
"	63- 22	AB		C
"	64- 66	AB		C
0CW030080FZWS	56- 20	AA		C
"	57- 71	AA		C
"	64- 13	AA		C
"	66- 83	AA		C
0CW030100FB BB	55- 48	AB		C
"	60- 20	AB		C
"	60- 30	AB		C
0CW030100FZBB	62- 15	AA		C
"	64- 25	AA		C
"	65- 36	AA		C
0CW030100FZBi	58- 42	AA		C
0CW040040FB Bi	66- 8	AA		C
0CW040040FZiT	55- 33	AA		C
0CW040060FN Bi	55- 37	AA		C
"	63- 37	AA		C
0CW040060FPWP	55- 41	AA		C
0CW040060FZBi	64- 7	AA		C
"	66-131	AA		C
0CW040060FZBP	57- 77	AB		C
"	63- 35	AB		C
"	66- 45	AB		C
0CW040060FZSW	66- 94	AC		C
0CW040060FZTP	55- 32	AA		C
0CW040060FZWS	55- 63	AA		C
0CW040080FN Bi	55- 35	AA		C
0CW040080FZBB	65- 22	AB		C
0CW040080FZBi	55- 40	AA		C
"	59- 48	AA		C
"	63- 36	AA		C
"	66- 7	AA		C
0CW040080FZWS	66- 4	AA		C
0CW040100FPWP	59- 55	AC		C
0CW040100FZBB	63- 34	AB		C
0CW040120FZBB	66-129	AB		C
0CW040120FZBi	64- 69	AB		C
"	65- 24	AB		C
0CW040250FZWS	63- 28	AC		C
0CW1001P441//	55- 44	AG		C
"	57- 51	AG		C
0CW2078P023B/	56- 21	AC		C
"	57- 52	AC		C
"	58- 39	AC		C
0CW2078P086B/	58- 46	AB		C
"	59- 38	AB		C
0CW2078P119B/	55- 71	AB		C
"	58- 70	AB		C
0CW2078P652//	57- 82	AE		C
0CW2088P034//	57- 83	AK		C
0CW2094P090A/	59- 47	AH		B
0CW2095P053//	55- 50	AE		C
0CW2095P310//	57- 84	AD		C
0CW2106P091//	55- 36	AC		C
"	66- 13	AC		C
0CW2107P032//	59- 54	AN		C

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK
0CW2119P045//	65- 7	AG		C
0CW2119P054//	65- 11	AD		C
0CW2129P188//	57- 89	AD		C
"	58- 44	AD		C
0CW2134P060//	65- 9	AK		C
0CW2142P037//	57- 79	AS		C
0CW2142P180//	60- 17	AE		C
0CW2144P409//	55- 69	AB		C
0CW2147P033//	59- 44	AD		C
0CW2158P003D/	55- 53	AF		C
"	57- 58	AF		C
"	59- 39	AF		C
0CW2158P005A/	59- 42	AD		C
0CW2158P009A/	59- 41	AD		C
0CW2158P035A/	56- 34	AD		C
0CW2158P348A/	58- 90	AD		C
0CW2158P377//	57- 69	AB		C
"	58- 36	AB		C
0CW2158P504//	55- 62	AK		C
0CW2158P521B/	57- 53	AE		C
"	59- 46	AE		C
"	64- 20	AE		C
"	66- 15	AE		C
0CW2160P344//	56- 29	AR		B
"	64- 9	AR		C
0CW2164P142//	56- 27	AF		C
0CW2166P004//	65- 13	AD		C
0CW2166P034A/	66- 19	AD		C
0CW2166P034B/	57- 55	AC		C
0CW2166P265//	55- 52	AF		C
0CW2168P010//	55- 55	AF		C
0CW2168P029//	57- 75	AF		C
0CW2168P030//	57- 78	AG		C
0CW2180P333//	55- 65	AC		C
0CW2185P023//	56- 30	AE		B
0CW2185P357//	62- 26	AA		C
"	64- 98	AA		C
0CW2185P357A/	62- 10	AA		C
0CW2185P358//	55- 47	AB		C
0CW2185P359//	55- 45	AB		C
"	64- 58	AB		C
0CW2198K239//	57- 95	AG		C
"	59- 75	AG		C
0CW2198P003//	57- 66	AH		C
0CW2198P302//	58- 45	AD		C
0CW2198P305//	56- 46	AH		C
0CW2198P422A/	61- 59	AY		B
0CW2199P117//	60- 16	AE		C
0CW2199P368//	58- 35	AD		C
0CW2205P025//	56- 36	AD		C
0CW2205P035//	58- 82	AF		C
0CW2205P037//	56- 35	AE		C
0CW2205P042//	55- 68	AD		C
0CW2205P050//	58- 72	AD		C
0CW2205P051//	58- 80	AE		B
0CW2205P052//	58- 78	AE		C
0CW2205P147//	56- 37	AC		C
"	56- 38	AC		C
0CW2205P152//	58- 85	AK		C
0CW2205P153//	58- 73	AF		C
0CW2205P351//	56- 33	AU		C
0CW2205P360//	56- 26	AD		C
0CW2210P092//	66- 87	AD		C
0CW2210P122//	65- 34	AC		C
0CW2210P312//	66- 23	AR		C
0CW2214K002//	59- 18	AW		C
0CW2214K004//	59- 5	AR		C
0CW2214K027E/	57- 45	AX		C
"	58- 27	AX		C
0CW2214K032//	58- 15	AK		C
0CW2214K033//	57- 42	AL		C
0CW2214K054//	55- 8	AH		C
0CW2214K101//	57- 85	AL		C
0CW2214K116//	58-501	AH		E
0CW2214K200//	55- 20	AP		C
0CW2214K201//	58- 2	AP		C
0CW2214K202E/	60- 7	AS		C
0CW2214K203//	55- 21	AN		C
0CW2214K204//	57- 4	AH		C
0CW2214K205//	55- 30	AL		C
0CW2214K206//	55- 22	AN		C

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CW2214K207//	58- 32	AM		C	
0CW2214K208//	55- 19	AS		C	
0CW2214K209//	57- 2	AR		C	
0CW2214K210//	59- 70	AT		C	
0CW2214K211//	59- 14	AL		C	
0CW2214K214//	58- 14	AG		C	
0CW2214K216//	57- 32	AH		C	
0CW2214K217//	55-501	AU		C	
0CW2214K222//	59- 24	AS		E	
0CW2214K223//	55- 31	AU		E	
0CW2214K224//	58- 12	AS		E	
0CW2214K240//	55- 7	BE		B	
0CW2214K326//	55- 1	BS		E	
0CW2214K344//	55- 3	BD		E	
0CW2214P004//	60- 3	AF		C	
"	62- 5	AF		C	
0CW2214P005//	60- 2	AG		C	
"	62- 4	AG		C	
0CW2214P007//	57- 18	AT		C	
0CW2214P009//	58- 18	AX		C	
0CW2214P011//	59- 30	AQ		C	
0CW2214P012//	59- 25	AR		C	
0CW2214P019//	57- 16	AP		C	
0CW2214P020//	57- 17	AE		C	
0CW2214P021//	57- 23	AE		C	
0CW2214P022//	57- 29	AE		C	
0CW2214P023B/	57- 20	AE		C	
0CW2214P030//	58- 17	AE		C	
0CW2214P031//	57- 41	AF		C	
0CW2214P032//	57- 44	AF		C	
0CW2214P033//	59- 28	AE		C	
0CW2214P035C/	58- 23	AF		C	
0CW2214P036//	57- 21	AE		C	
0CW2214P037//	57- 1	AH		C	
0CW2214P039//	60- 4	AG		C	
"	62- 6	AG		C	
0CW2214P042//	56- 6	AD		C	
0CW2214P043//	56- 3	AD		C	
0CW2214P044//	56- 4	AF		C	
0CW2214P046//	59- 67	AE		C	
0CW2214P051//	56- 28	AD		C	
0CW2214P059//	60- 13	AK		C	
0CW2214P060//	60- 14	AK		C	
0CW2214P061//	58- 5	AY		C	
0CW2214P062//	58- 21	BA		C	
0CW2214P063//	58- 26	AV		C	
0CW2214P064//	59- 26	AX		C	
0CW2214P065//	60- 1	AZ		C	
0CW2214P066//	60- 11	BA		D	
0CW2214P067//	58- 20	AU		C	
0CW2214P068//	55- 23	AM		D	
"	63- 18	AM		D	
0CW2214P070//	60- 19	AH		C	
"	60- 24	AH		C	
0CW2214P101//	57- 25	AE		C	
0CW2214P102//	58- 1	AE		C	
0CW2214P103//	58- 29	AD		C	
"	59- 66	AD		C	
0CW2214P104F/	57- 28	AR		C	
"	58- 10	AR		C	
0CW2214P108//	57- 6	AT		C	
0CW2214P109//	57- 12	AE		C	
0CW2214P110//	55- 10	AL		C	
0CW2214P111//	56- 2	AS		C	
0CW2214P112//	56- 13	AW		C	
0CW2214P113//	59- 1	AF		C	
0CW2214P114//	56- 1	AK		C	
0CW2214P116//	55- 29	AE		C	
0CW2214P117//	55- 15	AF		C	
0CW2214P118B/	56- 10	AM		C	
0CW2214P120//	59- 11	AQ		C	
0CW2214P124//	59- 31	AE		C	
0CW2214P126//	55- 14	AG		C	
0CW2214P127//	55- 2	AR		C	
0CW2214P128//	60- 6	AK		C	
0CW2214P129//	60- 12	AF		C	
0CW2214P130//	59- 29	AP		C	
0CW2214P131//	58- 8	AG		C	
0CW2214P132D/	58- 7	AM		C	
0CW2214P134//	58- 13	AF		C	
0CW2214P135//	55- 18	AE		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CW2214P136//	55- 28	AG		C	
0CW2214P138//	56- 5	AH		C	
0CW2214P139//	56- 14	AH		C	
0CW2214P140//	55- 26	AE		C	
"	63- 33	AE		C	
0CW2214P141//	56- 9	AH		C	
0CW2214P143C/	59- 16	AP		C	
0CW2214P144//	58- 62	AF		C	
0CW2214P146//	59- 65	AD		C	
0CW2214P149//	56- 43	AG		C	
0CW2214P154D/	58- 60	AH		C	
0CW2214P155//	58- 9	AG		C	
0CW2214P157//	56- 39	AK		C	
0CW2214P200//	57- 33	AZ		C	
0CW2214P201//	57- 35	AV		C	
0CW2214P205//	57- 15	AK		C	
0CW2214P206//	57- 14	AP		C	
0CW2214P208//	59- 32	AD		C	
0CW2214P209//	59- 27	AE		C	
0CW2214P300D/	57- 36	AU		C	
0CW2214P301//	57- 31	BB		C	
0CW2214P302//	57- 30	AX		C	
0CW2214P303//	58- 22	AD		C	
0CW2214P306//	58- 25	AV		B	
0CW2214P307//	58- 19	AD		C	
0CW2214P311//	58- 16	AF		C	
0CW2214P312//	57- 27	AD		C	
0CW2214P313//	57- 26	AD		C	
0CW2214P314//	57- 19	AD		C	
0CW2214P315//	55- 11	AR		C	
0CW2214P316//	57- 7	AS		C	
0CW2214P317//	57- 38	AS		C	
0CW2214P318//	57- 39	AR		B	
0CW2214P319//	57- 13	AP		B	
0CW2214P320//	57- 40	AQ		B	
0CW2214P321//	56- 31	BB		C	
0CW2214P322//	56- 12	BB		C	
0CW2214P323//	59- 13	AV		C	
0CW2214P328//	59- 37	AS		C	
0CW2214P331//	59- 21	BD		C	
0CW2214P332//	59- 20	AV		C	
0CW2214P335//	59- 69	AD		C	
0CW2214P339//	57- 34	BA		C	
0CW2214P340//	57- 10	AV		C	
0CW2214P341//	57- 9	AP		C	
0CW2214P342//	57- 43	AS		C	
0CW2214P343//	58- 3	AE		C	
0CW2214P344//	58- 24	AE		C	
0CW2214P347//	59- 17	AD		C	
0CW2214P348//	59- 8	AX		C	
0CW2214P349//	59- 6	AN		C	
0CW2214P350//	55- 9	AD		C	
0CW2214P352//	59- 33	AD		C	
0CW2214P376//	58- 86	AH		C	
0CW2214P377C/	59- 15	AS		B	
0CW2214P381//	59- 22	AD		C	
0CW2214P383//	59- 68	AE		C	
0CW2214P387//	59- 71	AE		C	
0CW2214P391//	58- 81	AG		C	
0CW2214P392//	58- 83	AG		C	
0CW2214P393//	56- 24	AG		B	
"	56- 25	AG		B	
0CW2214P402//	59- 3	AU		B	
0CW2214P403//	57- 24	AY		B	
0CW2214P405//	57- 3	AD		C	
0CW2214P406//	58- 31	AD		C	
0CW2214P453//	55- 51	AD		C	
0CW2214P454//	58- 89	AD		C	
0CW2214P455//	58- 57	AE		C	
"	59- 53	AE		C	
0CW2214P456B/	57- 73	AG		C	
0CW2214P458//	58- 59	AG		C	
0CW2214P459//	59- 58	AD		C	
0CW2214P460//	59- 60	AD		C	
0CW2214P462//	56- 11	AZ		C	
0CW2214P464//	59- 57	AE		C	
0CW2214P465//	59- 72	AM		C	
0CW2214P466//	59- 61	AG		C	
0CW2214P469//	57- 72	AE		C	
0CW2214P471//	57- 56	AQ		C	
0CW2214P472//	59- 64	AP		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CW2214P477//	58- 54	AH		C	
0CW2214P485//	58- 69	AD		C	
0CW2214P489//	55- 60	AH		C	
0CW2214P490//	55- 61	AG		C	
0CW2214P491//	57- 76	AH		C	
0CW2214P492//	57- 88	AH		C	
0CW2214P493//	58- 87	AG		C	
0CW2214P496//	55- 58	AE		C	
0CW2214P497//	55- 59	AE		C	
0CW2214P498//	55- 64	AE		C	
0CW2214P512//	55- 54	AG		C	
0CW2214P513//	55- 16	AG		C	
0CW2214P520//	56- 40	AU		C	
0CW2214P521//	58- 58	AF		C	
0CW2214P524//	57- 87	AG		C	
0CW2214P528//	57- 93	AC		C	
0CW2214P529//	59- 51	AC		C	
0CW2214P531//	57- 91	AC		C	
0CW2214P541//	60- 22	AD		C	
"	62- 21	AD		C	
0CW2214P542//	60- 23	AR		D	
0CW2214P544//	60- 23	AN		D	
0CW2214P546//	60- 23	AV		D	
0CW2214P569//	56- 44	AB		C	
0CW2214P575//	56- 7	BR		B	
0CW2217P135//	55- 29	AG		C	
0CW2221P336//	55- 56	AU		C	
"	59- 56	AU		C	
0CW2223K214//	60- 5	AX		C	
0CW2223P101//	57- 90	AD		C	
0CW2223P102//	58- 68	AH		C	
0CW2223P404//	55- 12	BN		B	
0CW2224P333//	55- 49	AN		D	
0CW2225P023//	65- 3	AU	N	C	
0CW2229P329//	62- 23	AC	N	C	
0CW2229P364//	63- 8	AE		C	
0CW2229P365//	64-106	AD	N	C	
"	65- 50	AD	N	C	
0CW2229P389//	64- 80	AD		C	
0CW2231K064//	58- 79	AY		C	
0CW2234K034//	55- 17	BD		E	
0CW2234K176//	58-502	AU		E	
0CW2234K202//	60- 7	AT		C	
0CW2234K203//	55- 78	AG		C	
0CW2234K213//	61- 97	AY		B	
0CW2234K217//	61-901	CA		E	
0CW2234K222//	55- 27	CA		E	
0CW2234P008//	57- 86	AG		C	
0CW2234P104//	55- 5	AG		C	
0CW2234P301//	57- 92	AF		C	
0CW2234P322//	58- 63	AH		C	
0CW2234P335//	59- 73	AG		C	
0CW2234P336//	59- 74	AG		C	
0CW2234P400//	59- 12	BK		B	
0CW2234P401//	57- 5	BM		B	
0CW2234P410//	56- 45	AR		C	
0CW2235P039//	60- 27	AG		C	
"	62- 12	AG		C	
0CW2235P041//	1- 33	AT		C	
0CW2235P042//	1- 33	AT		C	
0CW2235P045//	64- 65	AF		C	
0CW2235P304//	65- 28	AF		C	
0CW2235P404//	62- 13	AE		C	
0CW2241P601//	63- 26	BC		B	
0CW2247P727//	64- 24	AT		B	
"	65- 37	AT		B	
0CW2254K001//	63- 23	BE		C	
0CW2254K002//	63- 24	BD		C	
0CW2254K003//	64- 1	AU		C	
0CW2254K004//	64- 5	AV		C	
0CW2254K005//	66- 38	BA		C	
0CW2254K006//	66- 41	BG		C	
0CW2254K007//	66- 10	AQ		C	
0CW2254K008//	66- 11	AK		C	
0CW2254K057//	63- 19	BF		C	
0CW2254K073//	65- 40	AS		C	
0CW2254K500//	66-117	AG		C	
0CW2254K502//	64- 71	AH		C	
0CW2254K506//	66-105	AN		C	
0CW2254K507//	62- 19	AT		C	
0CW2254K509//	65- 43	AW		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CW2254K511//	66-119	AN		C	
0CW2254K512//	63- 30	BA		C	
0CW2254K513//	63- 25	BB		C	
0CW2254K514//	62- 18	AU		C	
0CW2254K516//	66-104	AH		C	
0CW2254K517//	66-120	AL		C	
0CW2254K518//	66-118	AR		C	
0CW2254K519//	66-126	AF		C	
0CW2254K530//	66-127	AE	N	E	
0CW2254K550//	66-128	AZ		E	
0CW2254P001//	65- 1	AV		C	
0CW2254P002//	65- 25	AV		C	
0CW2254P003//	65- 5	AQ		C	
0CW2254P004//	66- 74	AF		C	
0CW2254P010//	66- 18	AF		C	
0CW2254P011//	66- 35	AP		C	
0CW2254P012//	66- 20	AD		C	
0CW2254P013//	66- 89	AP		C	
0CW2254P014//	66- 53	AD		C	
0CW2254P015//	66- 52	AE		C	
0CW2254P016//	66- 42	AE		C	
0CW2254P017//	66- 54	AD		C	
0CW2254P018//	65- 20	AE		C	
0CW2254P020//	65- 31	AF		C	
0CW2254P021//	63- 2	BD		D	
0CW2254P022//	64- 63	AU		C	
0CW2254P023//	64- 11	AU		C	
0CW2254P024//	64- 37	AU		C	
0CW2254P026//	66- 68	AF		C	
0CW2254P027//	64- 22	AF		C	
0CW2254P028//	64- 67	AP		C	
0CW2254P029//	66- 50	AE		C	
0CW2254P030//	64- 50	AD		C	
0CW2254P031//	66- 62	AD		C	
0CW2254P032//	66- 92	AF		C	
0CW2254P035//	64- 34	AG		C	
0CW2254P036//	64- 35	AG		C	
0CW2254P037//	62- 9	AF		C	
0CW2254P038//	62- 8	AF		C	
0CW2254P040//	62- 1	AH		D	
0CW2254P041//	62- 2	AH		D	
0CW2254P042//	64- 62	AD		C	
0CW2254P043//	63- 15	BH		D	
0CW2254P046//	65- 39	AE		C	
0CW2254P047//	65- 16	AD		C	
0CW2254P048//	63- 4	AE		C	
0CW2254P049//	63- 1	AG		D	
0CW2254P050//	63- 3	AL		C	
0CW2254P052//	62- 3	BA		D	
0CW2254P053//	62- 16	AW		D	
0CW2254P054//	62- 17	AH		D	
0CW2254P055//	62- 14	AE		C	
0CW2254P056//	63- 9	AD		C	
0CW2254P057//	66- 57	AF		C	
0CW2254P058//	66- 59	AE		C	
0CW2254P060//	62- 31	AD		C	
0CW2254P061//	63- 17	BB		D	
0CW2254P062//	64- 32	AD		C	
"	66- 86	AD		C	
0CW2254P065//	64- 15	AD		C	
0CW2254P066//	63- 16	AT		D	
0CW2254P068//	64- 40	AD		C	
0CW2254P069//	66- 77	AE		C	
0CW2254P070//	63- 5	AE		C	
0CW2254P072//	66- 73	AD		C	
0CW2254P073//	66- 71	AD		C	
0CW2254P074//	64- 45	AD		C	
0CW2254P075//	64- 29	AD		C	
0CW2254P076//	66- 70	AK		C	
0CW2254P077//	64- 86	AD		C	
0CW2254P078//	66- 27	AE		C	
0CW2254P079//	66- 25	AD		C	
0CW2254P080//	66- 34	AP		C	
0CW2254P081//	66- 31	AF		C	
0CW2254P082//	66- 12	AD		C	
0CW2254P083//	66- 21	AD		C	
0CW2254P084//	64- 56	AE		C	
0CW2254P085//	64- 57	AE		C	
0CW2254P086//	65- 32	AE		C	
0CW2254P089//	63- 10	AM		C	
0CW2254P090//	64- 3	AE		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CW2254P091//	63- 13	AE		C	
0CW2254P092//	66- 69	AE		C	
0CW2254P093//	64- 73	AD		C	
0CW2254P094//	64- 97	AK	N	C	
0CW2254P095//	64- 27	AE	N	C	
0CW2254P097//	66-133	AE	N	C	
0CW2254P100//	66- 75	AH		C	
0CW2254P101//	66- 46	AT		C	
0CW2254P103//	66- 51	AG		C	
0CW2254P105//	66- 48	AE		C	
0CW2254P106//	66- 47	AH		C	
0CW2254P111//	64- 60	AP		C	
0CW2254P112//	66- 56	AN		C	
0CW2254P113//	64- 2	AZ		C	
0CW2254P114//	64- 18	AT		C	
0CW2254P115//	66- 2	AP		C	
0CW2254P116//	66- 3	AH		C	
0CW2254P117//	66- 63	AE		C	
0CW2254P118//	66- 66	AE		C	
0CW2254P119//	64- 6	AG		C	
0CW2254P121//	64- 48	AE		C	
0CW2254P122//	64- 42	AD		C	
0CW2254P123//	64- 21	AE		C	
0CW2254P124//	64- 64	AD		C	
0CW2254P126//	64- 89	AF		C	
0CW2254P128//	63- 29	AD		C	
0CW2254P130//	63- 27	AG		C	
0CW2254P133//	64- 61	AF		C	
0CW2254P134//	66- 43	AS		C	
0CW2254P135//	65- 21	AL		C	
0CW2254P136//	64- 52	AU		C	
0CW2254P137//	66- 36	AF		C	
0CW2254P141//	66- 39	AH		C	
0CW2254P142//	64- 47	AA		C	
0CW2254P143//	62- 7	AF	N	C	
0CW2254P145//	62- 25	AE	N	C	
0CW2254P200//	66- 29	AP		C	
0CW2254P201//	65- 8	AR		C	
0CW2254P202//	65- 12	AM		C	
0CW2254P203//	66- 30	AM		C	
0CW2254P204//	66- 16	AM		C	
0CW2254P210//	64- 54	AS		C	
0CW2254P212//	64- 14	AR		C	
0CW2254P213//	64- 39	AN		C	
0CW2254P214//	65- 2	AP		C	
0CW2254P220//	64- 44	AM		C	
0CW2254P226//	64- 41	AF		C	
0CW2254P228//	64- 95	AF	N	C	
0CW2254P301//	65- 18	AV		C	
0CW2254P302//	65- 17	AU		C	
0CW2254P303//	66- 55	BA		C	
0CW2254P304//	66- 80	AE		C	
0CW2254P305//	65- 33	AD		C	
0CW2254P306//	65- 19	AE		C	
0CW2254P309//	64- 8	BC		C	
0CW2254P310//	64- 30	AV		C	
0CW2254P311//	64- 19	AX		C	
0CW2254P312//	64- 33	AV		C	
0CW2254P314//	66- 26	AH		C	
0CW2254P316//	65- 23	AD		C	
0CW2254P317//	65- 38	AE		C	
0CW2254P319//	66- 84	AD		C	
0CW2254P320//	66- 65	AD		C	
0CW2254P321//	64- 68	AE		C	
0CW2254P326//	66- 40	AD		C	
0CW2254P328//	65- 26	AE		C	
0CW2254P330//	66- 78	AD		C	
0CW2254P333//	63- 12	AD		C	
0CW2254P335//	64- 51	AD		C	
0CW2254P336//	64- 26	AF		C	
0CW2254P337//	65- 6	AH		C	
0CW2254P338//	63- 7	AC		C	
0CW2254P339//	65- 30	AC		C	
0CW2254P340//	66- 58	AC		C	
0CW2254P342//	62- 27	AD		C	
0CW2254P343//	64- 59	AD		C	
0CW2254P344//	64- 12	AD		C	
0CW2254P345//	64- 74	AE		C	
0CW2254P346//	64- 72	AD		C	
0CW2254P347//	62- 32	AF	N	C	
0CW2254P348//	66- 93	AF		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CW2254P348//	66- 82	AR		C	
0CW2254P349//	64- 9	AN		C	
0CW2254P350//	63- 11	AD		C	
0CW2254P351//	63- 14	AC		C	
0CW2254P352//	64- 36	AG		C	
0CW2254P353//	66- 5	AT		C	
0CW2254P354//	63- 20	AK		C	
0CW2254P357//	65- 27	AE		C	
0CW2254P358//	64- 38	AC		C	
"	65- 46	AC		C	
0CW2254P359//	64- 85	AD		C	
0CW2254P360//	65- 29	AN	N	C	
0CW2254P361//	64- 53	AH	N	C	
0CW2254P362//	64- 75	AG	N	C	
0CW2254P363//	65- 48	AC		C	
0CW2254P364//	62- 28	AC		C	
0CW2254P365//	66- 44	AR		C	
0CW2254P366//	66- 81	AD		C	
0CW2254P373//	62- 22	AP	N	C	
0CW2254P374//	64- 84	AD		C	
0CW2254P376//	62- 22	AP	N	C	
0CW2254P377//	64- 94	AF		C	
0CW2254P378//	62- 22	AP	N	C	
0CW2254P380//	64- 77	AD		C	
0CW2254P381//	64- 83	AG	N	C	
0CW2254P382//	64- 82	AG	N	C	
0CW2254P385//	64- 81	AF	N	C	
0CW2254P388//	64- 78	AC	N	C	
0CW2254P391//	64- 93	AH	N	C	
0CW2254P392//	64- 92	AH	N	C	
0CW2254P393//	64- 79	AD	N	C	
0CW2254P394//	64- 91	AG	N	C	
0CW2254P399//	66-132	AD	N	C	
0CW2254P400//	66-122	AY		C	
0CW2254P401//	66-124	AY		C	
0CW2254P402//	66- 32	BB		C	
0CW2254P403//	66- 6	BM		B	
0CW2254P404//	66-102	BN		B	
0CW2254P405//	63- 39	AH	N	C	
0CW2254P470//	64-102	AC	N	C	
0CW2254P471//	64-103	AD	N	C	
0CW2254P472//	64- 99	AD	N	C	
0CW2254P473//	64-100	AD	N	C	
0CW2254P476//	66-139	AD	N	C	
0CW2254P477//	64-101	AF	N	C	
0CW2254P478//	63- 38	AG	N	C	
0CW2254P479//	64-104	AD	N	C	
0CW2254P480//	64-105	AF	N	C	
0CW2254P481//	66-135	AD	N	C	
0CW2254P482//	66-136	AD	N	C	
0CW2254P483//	62- 24	AR	N	C	
0CW2254P484//	65- 51	AD	N	C	
0CW2254P486//	66-138	AE	N	C	
0CW2254P999//	67- 42	AT		B	
0CW319300////	57- 48	AD		B	
"	59- 4	AD		B	
0CW338412////	59- 62	AE		B	
0CW338422////	57- 70	AB		B	
"	64- 43	AB		C	
"	65- 15	AB		C	
0CW338432////	57- 59	AC		B	
0CW39914////	62- 29	AC	N	C	
0CW4015P164//	66-130	AC	N	C	
0CW4016P167//	56- 16	AC		C	
"	57- 68	AC		C	
"	58- 48	AC		C	
"	59- 49	AC		C	
0CW4054P074B/	60- 26	AF		C	
0CW4060P012//	64- 31	AE		C	
0CW650593////	56- 23	AU		B	
0CW690381////	57- 47	AE		C	
0CW73303Z104H	67- 1	AB		C	
0CW8003P161//	63- 21	AD		C	
0CW812531////	55- 43	AA		C	
0CWE120000368	61- 89	AR		B	
0CWE120000870	55- 13	AM		B	
"	57- 37	AM		B	
"	59- 19	AM		B	
0CWE120000897	61- 68	AD		B	
0CWE120001505	67- 29	AF		C	
0CWE120001516	61-101	AF		B	



PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CWE120001551	66-109	AM		B	
0CWE230000031	61- 64	AK		C	
0CWE230000036	67- 46	AN		C	
0CWE240000309	55- 67	AP		B	
0CWE240000317	67- 87	AK		A	
0CWE240000356	55- 79	AS		C	
0CWE240000393	67- 49	AL		B	
0CWE250000107	61- 66	AX		B	
0CWE250000141	61- 67	AG		B	
"	67- 48	AG		B	
0CWE250000182	67- 47	AN		B	
0CWE311000977	61- 51	AB		B	
0CWE311000978	61- 50	AD		B	
"	67- 30	AD		B	
0CWE311000991	67- 34	AD		B	
0CWE311001019	61- 53	AD		B	
0CWE311001020	61- 52	AE		B	
0CWE311001033	67- 31	AC		B	
0CWE311001047	67- 32	AD		B	
0CWE311001049	67- 33	AE		B	
0CWE312000082	61- 70	AC		B	
0CWE312000090	67- 51	AC		B	
0CWE312001081	61- 71	AB		B	
"	67- 50	AB		B	
0CWE312001240	61- 69	AC		B	
0CWE312001241	67- 56	AM		B	
0CWE312001282	67- 54	AH		B	
0CWE312001290	67- 57	AS		B	
0CWE312001293	61- 16	AR		B	
"	67- 52	AR		B	
0CWE312001310	61- 18	AC		B	
0CWE312001337	67- 53	AE		B	
0CWE312001362	61- 15	AC		B	
0CWE312001363	61- 72	AG		B	
0CWE312001368	61- 17	AK		B	
0CWE312001377	67- 55	AE		B	
0CWE314000120	60- 9	AM		B	
"	60- 10	AM		B	
0CWE314000337	61- 65	AB		B	
0CWE314000528	58- 6	AL		B	
0CWE314000531	57- 11	AN		B	
"	60- 25	AN		B	
0CWE314000619	62- 11	AH		B	
"	64- 23	AH		B	
"	65- 35	AH		B	
"	66-121	AH		B	
0CWE314000625	66-106	AL		B	
0CWE321000320	61- 58	AK		B	
"	67- 35	AK		B	
0CWE321000358	61- 60	AG		B	
0CWE321000540	61-102	AW		B	
0CWE321000591	61- 63	AF		B	
0CWE321000636	67- 37	AG		B	
0CWE321000644	61- 14	AZ		B	
0CWE321000645	61- 13	BB		B	
0CWE321000650	61- 61	BB		B	
0CWE321000703	67- 44	AF		B	
0CWE321000706	67- 38	AR		B	
0CWE321000717	67- 39	BE		B	
0CWE323000280	61- 62	BC		B	
0CWE323000315	67- 36	BB		B	
0CWE323000343	61- 12	AD		B	
0CWE323000355	67- 41	AK		B	
0CWE420001011	61- 33	AC		C	
"	67- 88	AC		C	
0CWE450000005	60- 31	AA		C	
"	62- 35	AA		C	
"	63- 32	AA		C	
"	64- 88	AA		C	
"	66-107	AA		C	
0CWE450000067	60- 21	AC		C	
"	62- 20	AC		C	
"	65- 44	AC		C	
0CWE450000070	55- 6	AB		C	
"	63- 31	AB		C	
0CWE450000071	55- 25	AC		C	
0CWE450000368	55- 24	AD		C	
"	60- 8	AD		C	
"	60- 29	AD		C	
0CWE450000384	66-110	AB		C	
0CWE450000433	55- 4	AB		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CWE450000433	58- 11	AB		C	
"	59- 9	AB		C	
0CWE450000574	58- 61	AC		C	
"	59- 2	AC		C	
"	66-111	AC		C	
0CWE450000706	66-113	AD		C	
0CWE450000732	66-114	AC		C	
0CWE450000871	57- 22	AB		C	
"	58- 30	AB		C	
"	59- 7	AB		C	
0CWE450000893	64- 70	AD		C	
"	66-112	AD		C	
0CWE450000896	58- 4	AC		C	
"	59- 10	AC		C	
0CWE450000897	57- 8	AC		C	
"	58- 28	AC		C	
0CWE450001128	64- 87	AC		C	
"	66-101	AC		C	
0CWE450001130	66-125	AF		C	
0CWE70014J101	61- 98	AB		C	
0CWE70106JR22	67- 72	AC		C	
0CWE70162J100	61- 23	AA		C	
0CWE70162J101	61- 19	AA		C	
0CWE70162J181	61- 20	AA		C	
0CWE70162J202	61- 22	AA		C	
0CWE70162J472	61- 27	AA		C	
0CWE70188F153	61- 32	AA		C	
0CWE70188F243	61- 29	AA		C	
0CWE70188F683	61- 30	AA		C	
0CWE70188F751	61- 26	AA		C	
0CWE70188F912	61- 31	AA		C	
0CWE70188J100	61- 76	AA		C	
0CWE70188J102	61- 78	AA		C	
0CWE70188J104	61- 75	AA		C	
0CWE70188J105	61- 79	AA		C	
0CWE70188J152	61- 84	AA		C	
0CWE70188J153	61- 83	AA		C	
0CWE70188J154	61- 24	AA		C	
0CWE70188J202	61- 82	AA		C	
0CWE70188J203	61- 21	AA		C	
0CWE70188J222	61- 87	AA		C	
0CWE70188J223	61- 73	AA		C	
0CWE70188J302	61- 85	AA		C	
0CWE70188J821	61- 80	AA		C	
0CWE70188J912	61- 99	AA		C	
0CWE70197J4R7	61- 81	AA		C	
0CWE70205J222	61- 28	AC		C	
0CWE70205J332	61- 86	AA		C	
0CWE70213JR39	61- 25	AC		C	
0CWE70225J100	67- 68	AA		C	
0CWE70225J102	67- 74	AA		C	
0CWE70225J182	67- 83	AA		C	
0CWE70225J361	67- 82	AA		C	
0CWE70225J562	67- 78	AA		C	
0CWE70226J182	67- 79	AA		C	
0CWE70226J222	67- 69	AA		C	
0CWE70226J272	67- 80	AA		C	
0CWE70226J680	67- 66	AA		C	
0CWE70228J102	67- 62	AA		C	
0CWE70228J103	61- 74	AA		C	
"	67- 65	AA		C	
0CWE70228J104	67- 63	AA		C	
0CWE70228J105	67- 61	AA		C	
0CWE70228J153	67- 81	AA		C	
0CWE70228J154	67- 73	AA		C	
0CWE70228J223	67- 60	AA		C	
0CWE70228J331	67- 67	AA		C	
0CWE70228J472	61- 77	AA		C	
"	67- 59	AA		C	
0CWE70228J821	67- 58	AA		C	
0CWE70231F101	67- 85	AA	N	C	
0CWE70231F102	67- 70	AA		C	
0CWE70231F103	67- 64	AA		C	
0CWE70231F152	67- 76	AA		C	
0CWE70231F222	67- 77	AA		C	
0CWE70231F472	67- 84	AA		C	
0CWE70231F473	67- 75	AA		C	
0CWE70231F682	67- 71	AA		C	
0CWE71047J103	67- 86	AC		B	
0CWE73268J101	61- 3	AF		C	
0CWE73303Z104	61- 41	AB		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CWE73303Z105	61- 4	AD		C	
"	67- 2	AD		C	
0CWE73303Z224	61- 8	AC		C	
0CWE73303Z334	61- 38	AC		C	
0CWE73328K334	67- 11	AC		C	
0CWE73388J180	67- 14	AB		C	
0CWE73388J220	67- 15	AB		C	
0CWE73388J390	67- 12	AB		C	
0CWE73423M105	61- 43	AC		C	
0CWE73423M106	61- 1	AC		C	
0CWE73423M475	61- 7	AC		C	
0CWE73423M476	61- 6	AC		C	
0CWE73425M107	61- 36	AD		C	
0CWE73425M476	61- 42	AC		C	
0CWE73425M477	61-100	AD		C	
0CWE73431M107	61- 5	AF		C	
0CWE73488M105	67- 6	AC		C	
0CWE73488M476	67- 7	AC		C	
0CWE73490M107	67- 9	AC		C	
0CWE73492M127	67- 8	AE		C	
0CWE73495K102	61- 37	AB		C	
"	67- 3	AB		C	
0CWE73495K103	61- 39	AB		C	
"	67- 4	AB		C	
0CWE73495K561	67- 16	AB		C	
0CWE73496J101	67- 10	AA		C	
0CWE73497Z104	61- 2	AA		C	
"	67- 5	AA		C	
0CWE73537K221	67- 13	AB		C	
0CWE74071WE04	61- 46	AC		C	
0CWE74212WE06	61- 9	AE		C	
0CWE74212WE08	61- 10	AE		C	
0CWE74212WE09	61- 11	AE		C	
0CWE74269BK28	61- 55	AD		C	
"	67- 91	AD		C	
0CWE74291WE02	67- 21	AD		C	
0CWE74291WE04	67- 19	AC		C	
0CWE74299BK06	61- 44	AB		C	
0CWE74322WE07	67- 24	AD		C	
0CWE74322WE09	67- 26	AD		C	
0CWE74340WE03	67- 28	AC		C	
0CWE74340WE05	67- 25	AD		C	
0CWE74340WE06	67- 20	AD		C	
0CWE74340WE10	67- 17	AE		C	
0CWE74340WE11	67- 18	AE		C	
0CWE74340WE12	67- 27	AF		C	
0CWE74382WE03	55- 77	AL		C	
0CWE74436WE02	67- 22	AC		C	
0CWE74436WE06	67- 23	AD		C	
0CWE76005A6R2	61- 90	AE		B	
"	67- 89	AE		B	
0CWE76008G180	61- 35	AD		B	
0CWE76008H120	61- 91	AB		B	
0CWE76008H160	61- 34	AD		B	
"	67- 90	AD		B	
0CWE7700214A/	61- 56	AG		B	
0CWE77002373A	61- 54	AL		B	
0CWE7702006//	61- 57	AG		B	
"	67- 40	AG		B	
0CWE7703200F/	67- 45	AF		B	
0CWE7704914//	67- 43	AF		B	
0CWER020SKP//	64- 96	AB	N	C	
0CWER030SKP//	64- 46	AA		C	
"	65- 47	AA		C	
"	66- 33	AA		C	
0CWER040SKP//	64- 17	AB		C	
"	66- 28	AB		C	
0CWER050SKP//	63- 6	AA		C	
"	64- 16	AA		C	
"	65- 4	AA		C	
"	66- 22	AA		C	
0CWER070SKP//	64- 10	AA		C	
"	66- 60	AA		C	
0CWHP020060SC	57- 60	AC		C	
0CWHP020080SC	65- 10	AC		C	
0CWHP020100SC	59- 45	AC		C	
0CWHP020100SH	64- 28	AC		C	
"	66- 17	AC		C	
0CWHP020120SC	57- 50	AC		C	
0CWHP020120SH	64-107	AC	N	C	
0CWHP020140SC	57- 57	AC		C	

PARTS CODE	NO.	PRICE RANK	NEW MARK	PART RANK	
0CWHW030FZ///	62- 34	AA	N	C	
0CWHW030FZM//	57- 94	AA		C	
0CWHW060FZN//	66-137	AA	N	C	
0CWNSBLT00056	65- 14	AN		C	
0CWNSBLT00058	66- 72	AP		C	
0CWNSBLT00072	66- 14	AS		C	
0CWNSBLT00092	66- 9	AN		C	
0CWNSBLT00185	66- 1	AS		C	
0CWNT040FZ-//	62- 30	AA		C	
0CWSP030100FP	57- 62	AC		C	
0CWSP03016FPA	66- 91	AC		C	
0CWZ0030WE004	56- 42	AC		C	
0FT14136535//	54-265	AU		C	
0FT14261925//	54-270	AH		C	
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0FT23043398//	54-211	AF		C	
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0FT23078361//	54- 52	AH		B	
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0FT23124916//	54- 69	AK		C	
0FT23138429//	54- 23	AK		B	
0FT23149366//	54- 49	AH		B	
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0FT23165175//	54- 60	AH		C	
0FT23188655//	54- 58	AP		C	
0FT23188728//	54- 62	AP		C	
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0FT23246191//	54- 38	AF		B	
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0FT23252337//	54-264	AG		C	
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0FT23259242//	54- 71	AF		C	
0FT23259269//	54- 68	AF		C	
0FT23259285//	54- 3	AF		C	
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0FT23291235//	54- 30	AE		B	
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"	54-274	AR		C	
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0FT23371336//	54-253	AK		B	

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